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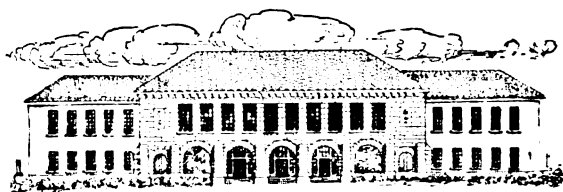
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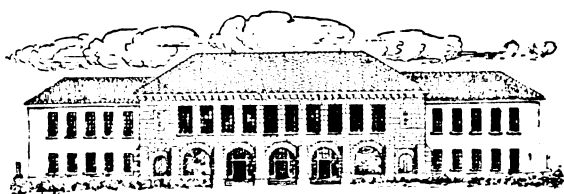


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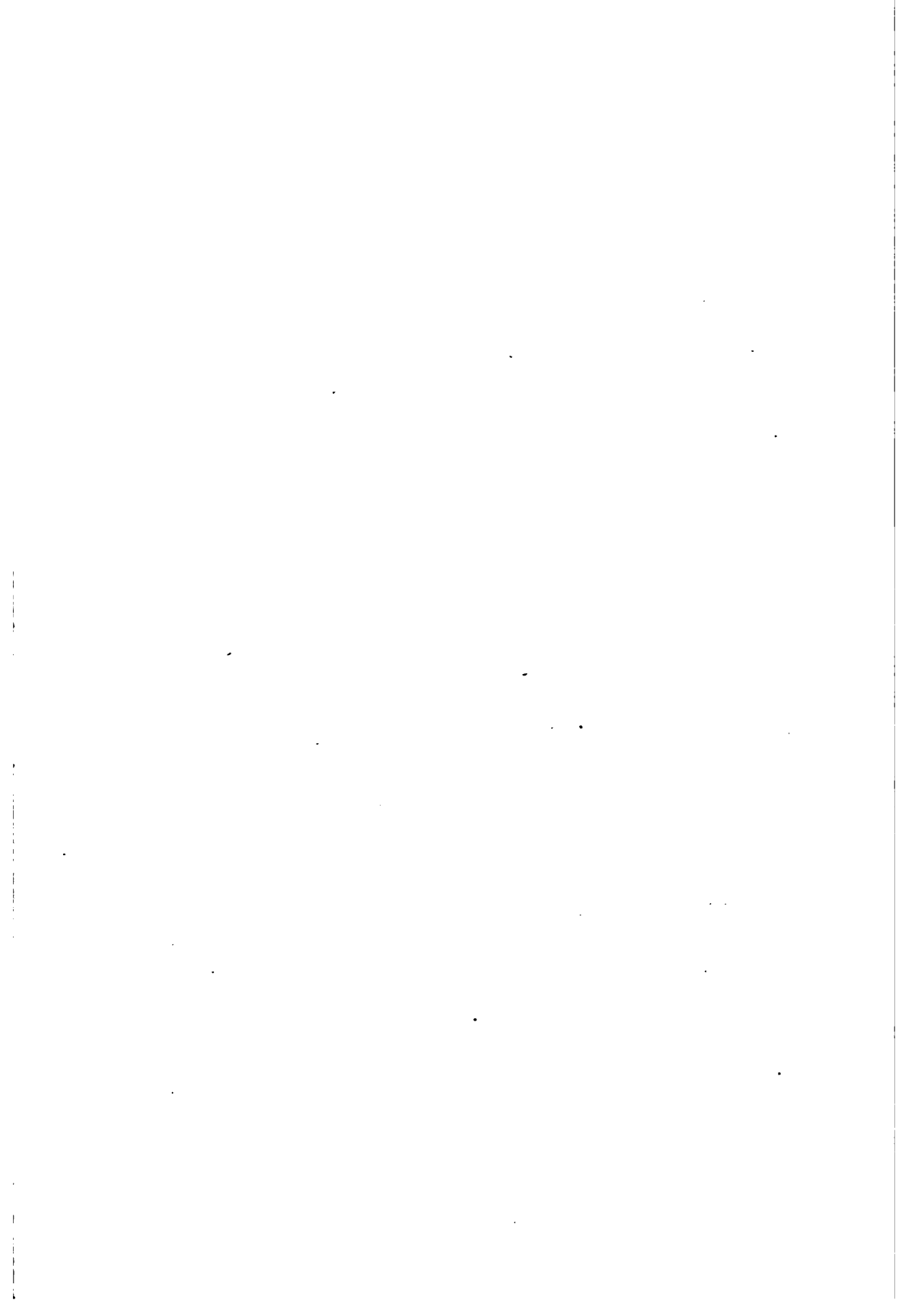




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Educational Foundations

VOL. XXV.

SEPTEMBER, 1913

No. 1

Editorial

A Great Quarter-Century 1888-1913

TWENTY-FIVE years ago Grover Cleveland was the President of these United States and was then in his prime at forty-eight years of age.

Ten States have been admitted to the Union since then, therefore there were but thirty-eight at that time. Thirty million people have been added to our population.

That was ten years before the spectacular Spanish-American War projected our nation upon a new era of expansion and planted Old Glory at the antipodes. How different now the condition in the Philippines and what miracles have been wrought by Uncle Samuel! How things have changed with us as a people, and how changed the world since 1888!

Dr. N. H. R. Dawson was then United States Commissioner of Education. Three others have since occupied the office.

The Public School Enrollment has increased approximately from twelve million to twenty million. Upwards of one hundred and fifty thousand more teachers are now employed.

In our Public High Schools twenty-five years ago there were about two hundred thousand students. To-day there are more than a million. Then there were nine thousand teachers in these High Schools, now we count over fifty thousand.

If there was a place for Educational Foundations in 1888 there is a larger place for Educational Foundations in 1913.

And here is our Anniversary Number!

Kind Words

For which the Editor gives thanks and which the reader is invited to read approvingly.

From the Superintendent of Public Instruction, State of California:

GESUNDHEIT.

Whenever an old friend has a birthday—an old friend who has been also a good friend whose coming has aroused in us many of the same emotions that lie in the heart of the wife waiting at the gate at 6 o'clock in the evening, well, whenever such a friend has a birthday we always are impelled to celebrate.

It is the 25th anniversary of EDUCATIONAL FOUNDATIONS that has inspired the feeling I mention above. Magazines may be published that are excellent and you admire them; but, while excellent, they are not ripened by age; they have not familiarized themselves with the inner cozy corners of our regard to the extent that they fit us like an old coat, whose every friendly curve and wrinkle we know and without which it would not be the same good old coat.

Age doesn't always make a thing better, but it certainly must be accepted as an excellent test of the thing's original and average merits, and when a thing like EDUCATIONAL FOUNDATIONS, after a quarter of a century of appreciation, still survives upon the high plane of our estimation, it must be apparent that it is good.

And this is a little chip off a corner of my friendship for EDUCATIONAL FOUNDATIONS. It is good to have a friend coming to see you regularly—a friend to whom you can say, and really mean it, "Come in, old fellow! My, but I'm glad to see you! Now let's take off our coats and be comfortable the whole evening."

And immediately you drift off together into the "Do you remember" stage.

Good luck; and may the next twenty-five be just as successful and just as full of helpfulness as the last.

Most cordially yours,

EDWARD HYATT.

From the Superintendent of Public Instruction, State of South Dakota:

Congratulations to you as EDUCATIONAL FOUNDATIONS enters upon its 25th year of efficient service in the educational field.

Sincerely yours,

C. G. LAWRENCE.

From the Superintendent of the Department of Education, State of North Dakota:

You will please accept my heartiest congratulations on the completion of twenty-five years of successful work. The results of your labors during that period have been such as to bring you into prominence throughout the entire nation. I am of the opinion that you have the heartiest good will of the leading teachers of our country. You have my best wishes for continued success and prosperity.

Yours very truly,

E. J. TAYLOR.

From the Superintendent of Public Instruction, State of Nebraska:

It gives me pleasure to state that I have been reading the EDUCATIONAL FOUNDATIONS, a monthly magazine of pedagogy, for several years past. It is one of the most helpful magazines for the superintendents and teachers of schools. It is continually dealing with those everyday problems that must be met by all progressive teachers, and these problems are solved by the leading educators of national reputation. We trust that the EDUCATIONAL FOUNDATIONS, which has been published for a quarter of a century, will be able to celebrate the bicentennial number.

Yours very truly,

JAS. E. DELZELL,

From the Superintendent of Public Instruction, State of Washington:

I have been a reader of EDUCATIONAL FOUNDATIONS for the past number of years, and I have found it very helpful in my work, both as a teacher and as a superintendent. It means much to the teachers of our nation to have an educational magazine which maintains such a high standard of professionalism.

Very sincerely yours,

JOSEPHINE PRESTON,

From the Superintendent of Public Instruction, State of Arizona:

I find EDUCATIONAL FOUNDATIONS complete in Educational essentials, and is in every way, and in the best way, what its name signifies. It deals with educational foundations in the widest and truest sense.

It is one of the educational magazines that is read and appreciated for its real merit in the Educational Department of the State of Arizona, and is highly spoken of by the leading teachers of the State.

Yours very truly,
C. O. CASE,

From the Superintendent of Public Instruction, State of Iowa:

I really know of no educational journal that contains more matter of practical value to the student of education than is published in EDUCATIONAL FOUNDATIONS.

A. M. DEYOE,

From the Superintendent of Public Instruction, State of West Virginia:

I congratulate you upon your entrance upon your twenty-fifth year of a successful career. I have read your columns more or less regularly during this entire period and have found them a source of much inspiration and help. You are doing better work to-day than ever before, and it is to be hoped that your one hundredth anniversary will still find you youthful, vigorous and growing. Such publications are a great boon to the educational interests of the country.

Very truly yours,
M. P. SHAWKEY.

Anniversary Letter

From the Founder of Educational Foundations

[The following letter from Dr. Amos M. Kellogg, founder and first editor of this journal, is full of human as well as of educational interest. The writer has just passed his 82nd birthday. We tender him thanks and appreciation from a large circle of friends.—Ed.]

To the Editor of EDUCATIONAL FOUNDATIONS:

I have attempted to reply to your request for a statement of my reasons for issuing twenty-five years ago the publication having the specific aims of Educational Foundations. It was not a commercial enterprise. I undertook the hazards and labor of publishing Educational Foundations because it was apparent that there was a really earnest desire felt by many teachers to advance beyond the mechanical course then usually pursued in the school room. "Keeping school" was a term then extensively used and it described the case pretty accurately. I believed I understood how a school could attain the high ends of education and absolutely accomplish the objects so much desired and be a place of extreme happiness and positive heart and soul growth.

I suppose I shall here be allowed to be somewhat personal, for having solved, as I thought, the problem how to make the school an educational institution I felt able to impart my discovery to others.

When eighteen years of age that great question, "What shall this man do?" had to be answered. I was offered a place in a bank in the City of Utica and while hesitating about accepting it, I attended a teachers' institute in the old court house in Whitestown conducted by that marvelous man, David Perkins Page, then principal of the Albany Normal School. If any man was ever inspired to declare the living truth concerning the "Heritage of the Child" (his favorite theme) Mr. Page was the man. Of him one highly gifted woman said: "He does not seem to be a man but an angel." Horace Mann said of him that he was the one man in the State of Massachusetts that could explain education. Mr. Page did not plead

for high scholarship, but for a high understanding of the nature of the child and of the means to lead it into the highest and noblest stages possible of thought and life. To be a teacher seemed to his listeners to be the noblest work in the world, and I then and there determined to be one.

I began teaching in a little red school house, to be paid eleven dollars per month and "boarding round." One conviction had been deeply impressed during that hour with Mr. Page—that the difference between poor schools and good schools lay not in *what* was taught but in *how* they were taught; so I began a study of the operations in adjacent districts to learn what to do and what to leave undone. After two winters of this I was able to reach the goal of my wishes, to attend the Normal School but alas! Mr. Page had been followed to his wintry grave by his heart-broken pupils.

Having a good academical preparation, I gave the closest attention to the School of Practice: my valedictory was concerning the "Attainment of Ideals." Being appointed after a year to give instruction in the Normal School in the Theory and Practice of Education, I set out to accumulate a suitable library in order to make a large study of the problems that must be explained. The number of books for teachers in those days was few; of Tate's "Philosophy of Education" I managed to get a copy; there were probably not a half dozen copies in America.

After five years as a Normal School instructor, five years conducting Teachers' Institutes in Michigan and superintendence, and ten years at the head of Bergen Institute, where I was wholly free to test the theories I had formed, I felt emboldened to publish the discoveries I had made.

In 1874 I sent the School Journal out to the teachers, this was a weekly publication; in 1878 the Teachers' Institute, now the Teachers' Magazine—this was issued monthly. In both of these I regarded the readers from the standpoint of a teacher of the Principles and Practice of Education. In various forms it was declared that the amount of academical knowledge required of the teacher was no more than should fairly be possessed by every citizen, that beyond this special knowledge and abilities were needed to enable him to lead his pupils to understand themselves and the world they were born into. This it was urged was the qualification that made teaching possible. As it was not denied that a body of specific knowledge

should be possessed when my efforts were discussed they were defined as attempts to "professionalize" the teacher's work.

I began to notice a state of earnest inquiry among young men in rural districts possessing a fair amount of general knowledge who were aiming at places of importance in the rapidly rising union schools. They saw that the public gave immediate preference to the graduates of the normal schools, that to obtain these higher places they must possess special or as it began to be termed "professional" knowledge. There was a willingness to make further acquirement but few would attend a normal school as I steadily advised. To lighten the heavy burden imposed by letters of inquiry I prepared a circular which embodied practical advice for these teachers who were earnest to make more progress; but still more inquiries were aroused by the issuance of that circular and I tried to meet them by the issuance of a larger circular. Thus for fourteen or fifteen years I made a steady effort to induce the investigation of educational problems, especially urging to own and read books that discussed principles, citing the example of the lawyer and physician. I gave the names of half a dozen books, placing Page's *Theory and Practice of Education* first; this volume I was enabled to offer at a very low rate by the publisher, who assured me I was his chief customer, which simply proves that the teachers had not thought that specific knowledge was needful.

But I could feel there was a real desire for specific knowledge; how to furnish that specific or professional knowledge was now the problem to be solved. I clearly felt in my own mind that if I had any mission it was to give instruction in the Art and Science of Teaching. Though loaded down with work on the two journals named, I sent out in 1888 (I think) an eight-page journal, entitled *The Teachers' Profession*, at fifty cents per year. After a year the title was changed to the *Professional Teacher*. As four great subjects were chosen for discussion, the History, Principles, Methods and Civics of Education—the latter two include courses of study, buildings, etc.) the change of title to *Educational Foundations* seemed appropriate. When this plan was fixed upon and that name was given to the journal it was not designed to be a review or a magazine, but a book in monthly parts giving such specific instruction as would be given in a normal school. The readers were advised that the claim to the title of teacher lay in possessing this specific knowledge.

To bring system into the reader's efforts a four years' course was laid out and volumes on each of the four great subjects were planned. Not to dishearten those just beginning to teach who found it hard to see a relation between the advised books and the routine called "school keeping" twenty primers were published for first year readers at 12 cents each; among these were some of the most precious literature obtainable, as Huntington's "Unconscious Tuition"; Hughe's "How to Keep Order"; Prest. Butler's "Manual Training," etc.

To the second year students some twelve larger volumes were offered at 20 cents each; among these were Browning's "Aspects of Education," Reinhardt's "History of Education," Blakie's "Self Culture," etc.

To those of the third year a selection of some twelve volumes was offered, among these were Browning's "Educational Theories," "Froebel's Autobiography," Hughe's "Mistakes in Teaching." The price of this series was 50 cents each.

For the fourth year at \$1.00 each, Quick's "Educational Reformers," Perez "First Three Years of Childhood," Currie's "Early Education," "Fitch's Lectures on Teaching," Parker's "Talks on Teaching," and others.

It would be apparent if the entire list, consisting of seventy-five volumes, was examined, that there was an earnest attempt to place in the hands of teachers the noblest literature pertaining to their calling.

Educational Foundations was then the speaker, the lecturer, asking and answering questions and encouraging investigation and study of educational problems. After a time what may be termed a "pedagogical era" set in that is still vibrating all over the land. Educational books have become numerous.

This reference to the attempt made to bring philosophy into the work of the school-room enables me to offer a tribute of thankfulness to those who were able and willing to co-operate. The list would be a long one and I can only here mention the names of Dr. Jerome Allen, Col. Francis W. Parker, Dr. Edward R. Shaw and Mr. Ossian Lang. All of these except the last named have gone before.

An entire volume could be employed in detailing the struggle to place the teacher's work on a higher plane and the successful re-

sults that followed, but I have room to mention but one. Soon after Dr. Allen joined me he undertook the task of giving a course of free lectures at the New York University on the four great themes. One of these, Mr. Charles Butler, a wealthy retired New York merchant, accidentally attended and was so deeply impressed by the portrayal of a need of a larger study of teaching that he said to the speaker, "I will give \$100,000 for the endowment of an institution to attain that end." Thus was founded the noble School of Pedagogy of the New York University, where the plans proposed in Educational Foundations were unfolded, expanded and made the basis of a science. If the portrayal of the need of a more enlightened course in the school room could so effect a layman it is a certainty the listening teachers would be moved to lines of action for practical improvement.

Now that a quarter of a century has passed, it is apparent that the public mind has become conscious that a broad preparation is needful for teaching. Questions such as those on page 563, May Educational Foundations, were not proposed then even to superintendents; they disclose a humanitarian as well as philosophic atmosphere; the teacher is lifted out of his narrowness by considering them and made to feel that while a toiler often in an obscure position he is truly acting on lines requiring an intellectual ability of no ordinary kind.

But the summit is not yet reached. The next step is apparent. The age is rightly termed a materialistic one; finer school buildings, higher salaries are pointed at as evidences of progress in education. But the thoughtful will see there must be a reason why the teaching of a Judean peasant produced such an astonishing and mighty effect—one that is still in progress and gathering in force. To make knowledge the object of the operations attempted by the school is not in line with the movement he began; the real aim is thus obscured and partially lost. The question so often on the lips of Colonel Parker, "What is the motive?" is significant. The Puritans were not "knowledgeable personages"; many of those who came to the American wilderness could not write their names, yet they were truly "educated."

The end sought must be a spiritual one. The counsel, "Seek first the kingdom of God," may repel to-day but will be accepted tomorrow.

A. M. KELLOGG

Educational Progress in the United States

BY ANNA TOLMAN SMITH,

Specialist, United States Bureau of Education, Washington, D. C.

Written at the request of Dr. P. P. Claxton, United States
Commissioner of Education

The progress of education during the last quarter of a century has been very fully reflected in the Annual Reports of the Bureau of Education, which serves as a clearing house for educational information. It may be recalled at this time that the need of such a central agency was urged by leading educators for nearly two decades before the office was created. It was finally called into existence by conditions which seemed to threaten the stability of the Government itself; alarm was particularly excited by the increasing illiteracy in the country, and this was seized by the National Association of Superintendents as a reason for renewing the effort to secure a federal office of education. At a meeting of the Association held at Washington in 1866, Dr. E. E. White was appointed chairman of a committee of five to present the subject to Congress. The bill drawn up by this committee was carried through the House of Representatives largely through the influence of Hon. James A. Garfield, afterward President of the United States, passed the Senate by a large majority, and received the signature of President Johnson, March 2, 1867. The office was placed at first on an independent basis, but was made a Bureau of the Interior Department by act of Congress, July 1, 1869, without, however, any change of functions.

The act under which the office was created called expressly for two classes of information: first, statistics and facts showing the actual condition of education in the several States and territories; second, precise statements as to the grants of land made by Congress to promote education and the manner in which these several trusts were administered. Apart from these requirements large discre-

tion was left to the Commissioner as to the efforts which might best serve the interests of education. Hence, the work of the office was planned on a broad scale by the first commissioner, Dr. Henry Barnard, who had achieved world wide distinction in the field of educational investigation. While successive Commissioners have maintained this large conception of the work, each one has necessarily emphasized the more urgent problems of his own time.

The second Commissioner, General John Eaton, who was appointed March 17, 1870, came to the office just at the time when the questions of school supply and demand were paramount. The revelations of the census of 1870 with regard to illiteracy were re-enforced by convincing proof of a relation between crime and illiteracy, graphically set forth in Commissioner Eaton's first report. The results of the public agitation of this problem are indicated by the progress of a decade, as shown in the Commissioner's report for 1881. For the population 10 years of age and over, the proportion of illiterates had declined in the decade from 20 per cent to 17 per cent. Each succeeding decade has witnessed improvement in this respect, although even now the proportion of illiterates in the population above 10 years of age, i. e., 7.7 per cent (census of 1910), is cause for alarm.

The school enrollment in the United States in the first two decades of the Bureau's operations increased by 85 per cent, while the increase in population was only 62 per cent. This disparity naturally lessens as the supply of schools measures up to the demand.

The expenditure for public schools has increased by a much higher rate than the school provision, particularly during the past 25 years. In 1885, the total expenditure as shown by the Bureau reports was \$110,328,375; in 1910, it was \$426,250,434. The expenditure per pupil, which in 1885 was \$15, in 1910 was \$33, and it is still increasing. This rise in the cost of public education is due to several causes, of which the chief are the multiplication of well equipped high schools, the rise in teachers' salaries, the lengthened school year, and the higher cost of building sites in the rapidly growing cities.

In every investigation with which social science is concerned the collection and sifting of crude facts is fundamental, and this activity engaged the chief efforts of the Bureau for at least two

decades; as a result of its systematic inquiries every State and every city came to realize the value of uniform methods of reporting. During this early period, however, the larger aspects of education were carefully followed and as the resources of the office permitted historic researches were undertaken and the record of progress supplemented by that of origins. Thus, through a central agency dealing with the country as a whole the United States has at command a complete survey of the conditions that make for popular intelligence and for the higher orders of directive force.

In September, 1889, Dr. W. T. Harris was appointed Commissioner of Education. The event marks the close of what may be called the formative period of the Bureau, as well as an important stage in the progress of national education. The country itself had started upon an era of industrial expansion and social complications that created new problems in education and taxed its resources to the utmost. The racial problem in the South and the immigrant problem in the North bore directly upon the management of schools, their discipline and studies, and the entire field of education was disturbed by the clash of traditional ideals and immediate demands. The educational record of the last quarter of a century is a record of upheavals and readjustments, through which, however, progress has been steadily maintained.

In regard to the systems of public instruction, three striking evidences of progress may be noted: the multiplication of high schools; the rise of professional supervision; the uplift of rural schools. It would be impossible here to do more than suggest the growth in these respects.

In 1889 there were 2,526 public high schools reporting to the Bureau of Education, with 9,120 teachers and 202,963 pupils; in 1912 there were 11,224 high schools, with 51,853 teachers and 1,105,360 pupils. Private secondary schools increased, but relatively much less. The addition of their students would swell the total students in secondary schools to 297,894 in 1889, and to 1,246,827 in 1912, or four times the number at the earlier date. During this period, also, there has been a notable change in the main direction of high school studies, indicated by the increasing proportion of students in the modern courses and the provision of separate classes of high schools, i. e., technical, business, and agricultural. The high school still has for a mission the preparation of students for

higher institutions, but this is no longer the main direction of its activities.

The supervision of public systems of education has developed in two directions: Concentration of authority; specialized services. New York State reached the high mark of concentrated authority under its first State Commissioner of Education, Dr. Andrew S. Draper, whose recent death has removed one of the most forceful personalities that has ever served the cause of education in this country.

The multiplication of expert services relating to the individual and social welfare of the young is more significant even than liberal expenditure for the chief officer of education. These services have risen, one by one, in response to local demands, or in the light of science that surges over the path way of modern life. Truant officers, medical inspectors, vocational directors, all indicate the growing conviction that the welfare of the nation hinges upon the health and efficiency of the individual, assured by care and nurture in youth. By these agencies society seeks "to realize on all latent assets of human capacity."

The movement for the improvement of rural schools began 40 years ago with a cautious experiment in Massachusetts for replacing district schools by a central school with means for conveying children to and from the school at public expense. The idea spread rapidly and the consolidated school is now a feature of the school systems in above 30 States. Massachusetts spends at least \$300,000 annually for the transportation service; Indiana, \$290,000; Virginia, \$25,000, but at these figures the system is a saving over the old plan of small isolated schools. The district school with a single teacher is, however, still with us and has gained a new hold upon some communities in the movement for bettering rural conditions generally, which finds the school a convenient center of operations. The latest departure in the rural school service is the creation of a division in State education departments to deal exclusively with this interest; supplementary to this central service are various forms of rural supervision under the direction of men and women who combine the professional requirements for school inspection with those of directors of community industries and co-operative action.

In the field of higher education comprised in the term general and professional education, amid a bewildering maze of experiments,

discussions, and innovations, three important tendencies are discernible: Distinction between college and university functions; rational evolution of different, but equivalent, courses of study; regard for the newer professions in the co-ordination of academic and professional studies.

The distinction between college and university functions received its first emphasis in this country through the plans adopted by Doctor Gilman for Johns Hopkins University, and it has been enforced by the costliness of scientific equipments. The financial resources of universities are now reckoned in millions, in place of the modest sums which once served the needs of higher education. The sifting and evolution of studies has grown naturally out of the elective system, which is perhaps the most fruitful of the many contributions made to the service of higher education by President Elliott of Harvard; in like manner the readjustment of studies with the closer articulation of secondary and higher institutions has grown out of the system of accredited high schools, started at Michigan University in 1871 under President Angell, who clearly foresaw the new services to which higher education must respond.

An impressive feature of the recent history of education is the rise of agencies external to the public school systems and to the higher institutions, but which are exercising a powerful influence upon them all. It is estimated that \$100,000,000 have been given from private fortunes during the last decade to promote education, and generally with most large and liberal provisions as to uses.

The General Education Board, The Rockefeller Foundation, and The Carnegie Foundation for the Advancement of Teaching are princely creations of the last decade; but they follow the noble precedent set by the George Peabody Fund, the John F. Slater Fund, and the Anna T. Jeanes Fund, whose services to the cause of national education are simply immeasurable.

The Russell Sage Foundation, with an endowment of \$10,000,000, though not strictly educational in its purposes, bears directly upon the interests of the public schools in its investigations of the causes and remedies of poverty and misery.

An interesting feature of the educational record of this country is the unity of aim and method which marks the independent State and city systems. Among the forces making for such unity should be mentioned the educational journals and associations which keep

up a perpetual interchange of ideas and information. Among these agencies, the National Education Association is the most widely known, and by its permanent organization in sections typifies every order of educational work. A powerful formative influence is exercised by the annual conference for education in the south, which held its sixteenth meeting the present year.

The magnitude and complexity of the work, and the variety of agencies which it employs, make a complete summary of educational progress in the United States for any definite period impossible. As regards public schools alone the following items are significant of a quarter of a century's growth:

	1895.	1910.
Percentage of enrolled pupils in average attendance	67	72
Average length of school term (days).....	139.5	157.5
Average monthly wages of teacher	\$41.02	\$61.70

Attention has already been called to the great increase in the annual expenditure for education. Not less striking is the increased value of school property; as reported to the Bureau of Education this amounted in 1910 to \$1,091,000,000, or more than four times the value reported in 1885.

The increasing demands have brought new and great responsibilities upon the higher institutions, with an ever enlarging registration of students and financial resources. Although here statistics are incomplete, it is interesting to note that the number of students in universities, colleges, and schools of technology reported in 1910 was 172,000, which is more than three times the number reported in 1890. The receipts of these higher institutions in 1910 aggregated \$80,438,987, or approximately four times the corresponding amount in 1890.

It will be readily understood that the growing magnitude of the educational work of the United States, and the multiplication of agencies, public and private, engaged in this important service have brought new responsibilities upon the Bureau of Education.

The Hero as Teacher

(In Imitation of Carlyle.)

BY GILBERT COSULICH.

West Des Moines High School, Des Moines, Ia.

We have already considered one kind of Unrewarded Hero: the Man of Letters. We will to-day take up another. Like Burns, Rousseau, and Old Samuel, he, *too*, has not been rightly dealt with by this world! A Candle, the Italians call him; consuming himself in lighting others. Behold for this twelvemonth, we say to him, two hundred pounds: go-forth and teach our Young! Teach, and much else besides: You are to be a Perfect man, a *Paragon* of men. You must fulfill lavishly, with these two hundred pounds, all duties of Citizenship and Convention; must see, likewise, that your Mind and Soul be fed and refreshed with Books, Music, Flowers, Travel. It were well, too, having done all this, that you set an example of Thrift; well that you lay by something for the day when you will be cast-off! Go-forth,—and look you that you please the Board of excellent Butchers and Bakers we have placed over you!—

In this, as in other forms of Heroism, we find Simulacra and Realities. They who Profess what they are *not*, who use the *Profession* as a Ladder, that they may step-over it to something else, are not, we might rightly say, True men; *Insincerities*, rather. To use Teaching as a means, to make it buy law-books or marriage-garments, is, as I think, no right thing. Nor ought we count Heroes those owners of Private Schools who would teach our children this or that at half the price in half the time!—These are the Quacks: the Genuine men are not to be confounded with *these*.—History shows some right true Teachers, only a few of whom can here be spoken of. . . .

Great men, these; veritable Heroes. Such, too, are not wanting in our own times: in the Universities, Grade-Schools, Kindergartens; in Cities and Pagan Villages;—anywhere, one might say, save in the Newspapers! Such Quiet Heroism is never proclaimed *there*.—

It might be well to ponder a moment this of Newspaper Recognition. It is *our* gauge of Hero-Worship: by it we can know whether we are a *Valet-World* that will not recognize a Gear-less King. A *Money-King* dies: our Newspapers put-out "Extras"; a Princess goes a-hunting: we shall have two columns of it to-morrow! *These* happenings have "News Value", we are told. A Teacher does great and good Work in a lower school: our eye never encounters mention of *him*.

Nay not sensible even of our own Interests, we permit him to *rust* there, rather than place him where he can better serve us. Perhaps there are some among you that know of such: college-statured men, working in the Chart-classes! Nothing, as I think, can be sadder for a man of Spirit and Talent than to be thus *warped*. Saa for *us*, too. A man standing and waiting may also serve, but the world loses; loses the Difference between what it *could*, and what it *does*, get from him. Columbus might have served by standing and combing wool! Much good cannot come to the world, *so*.—But sadder still for us is it when he of the Chart-Class steals into the University! Him, too, we have known; have been taught by him, perhaps. Few Unrealities are more dangerous than this of *professing* to impart what one has not.—

For the Cause of these Unfitnesses, we must turn to those in whom the *Ultimate Power* resides. The Butcher-Baker Trustees, Administrators, or what name soever we choose to call them—they who are the Source of our School System, they higher than whom, by a simple principle of Physics, it cannot rise—these men, I say, being Estimable Tradesmen, cannot judge Teachers; can, in fact, judge little other than Pork and Flour! . . .

Better School Teaching

WILLIAM ESTABROOK CHANCELLOR.

IV

The Child and His Family or Hers.

The teacher who makes at least mental notes of the differences between children in respect to family and home will find such points as these, e. g.—

Mary.

Both parents living.
Third child in family of seven.
Good house.
Farmer's family.
Some books to read at home.
Prosperous and happy.
Well cared for.

Frederic.

Mother dead, father old.
Youngest in family of five.
Live in a few rented rooms.
Day laborer in town.
No books or pictures.
Poor and unhappy.
Teeth in bad condition; not well clothed.

It is not necessary to put all these items into a card index; but personally in trying to get such information, I have come upon exceedingly interesting and important facts. Once, I found that a boy who often went to sleep at school.

1. Had tuberculosis.
2. Sold papers from 5 a. m. to 8:30 and again from 4 p. m. to 7.
3. Worked in a motion picture show till 11 p. m.
4. Earned at thirteen years of age as high as \$5 and even \$6 a week.
5. Was the sole support of a drunken father and of a bed-ridden invalid mother.

At the opposite end of the social scale, I have come upon just as important but not quite as interesting conditions.

By setting certain social agencies at work, the boy was substantially cured of his tuberculosis and is now, years afterwards, nearly of normal size and unusually intelligent, the mother is able to get about, and the father for several years has been more than self-supporting, though not yet completely quit of his drinking habits. Often, however, the individual teacher, who learns of unhappy conditions at home can do no more for the child than understand, encourage and sympathize with him,—no more, but this is a whole world of difference to him!

The peculiar children often seem less peculiar and almost always less repulsive and difficult when we know the facts about their parents and homes.

It may, perhaps, be asked at this stage whether in truth teachers are expected to know so much and to do so much and to be so important in their communities as the foregoing suggestion regarding home-visiting seems to imply.

The Purpose of the School Is Not the Self-culture of the Teacher.

Most persons who teach do so immediately upon their own "leaving school" and their desks as pupils. They do not, in fact, "leave good," but they go from the pupil's desk to the teacher's, in a lower grade to be sure, but still within the confines of the school. Undoubtedly, in most cases, it would be far better for us if we could spend an intermediate year in working upon some farm not our father's or uncle's or in clerking in a store or in travel or as laborer or mechanic in mine or shop or foundry or factory. But we need the money for self-support and often to help our parents. In consequence, we cannot find or make for ourselves the opportunity for complete self-alienation from the attitude of the pupil. This is exactly as true of the man who goes from the post-graduate university course with his doctorate of philosophy after perhaps nineteen or twenty years of study and of the woman who goes from the two or three years normal course with her life-diploma into the schoolroom as it is of the girl of seventeen or eighteen who teaches with the lowest temporary certificate in the same district school where she has spent ten years as a pupil.

Self-alienation.

All these teachers who have always been school pupils until they began to teach have looked upon their teachers with the eyes of school children and youth. They have seen the outside,—heard the voice, seen the actions of teachers. Perhaps, I can speak as well as anyone else with full sympathy, for in a sense I have never had that emancipation and self-alienation. Perhaps in a way, fifteen years and more of the business that goes with city superintendencies and travel in every State and in Europe have given me something of the objective and distant point of view of one who is wholly disconnected from the school; but in my own case, at least, I am well aware that it is hard for me to look upon the world with its teachers impartially.

The fact, however, is that the business of the school teacher is distinctly and greatly different from what it seems to the pupils to be. It is a big work, a social mission; it is religion in practice, it is a science and it is an art. It is as big a work, as truly religious, as scientific, as artistic, as the work of the general family physician, who must be medicine-giver and surgeon and health-adviser, all in one. To the teacher is given both the cure of souls and the care of bodies, both the responsibility of helping individuals and the opportunity of helping the community. Teaching is personal education and social service.

The Six Learned Professions.

The longer one teaches, the greater the work grows, the more one sees in it. Twenty years ago, teaching ceased to be "a stepping-stone to the law" or the ministry or medicine or business; it has become a learned profession ranking with the three ancient learned professions of law, of medicine and of theology, and being one of the three new learned professions, education, journalism and engineering.

It would carry as far afield from the present theme of better school teaching to pause here and to discuss at length what in truth these six learned professions now are; but because it is desirable to see why one should, as a teacher, know the homes of the people, a paragraph is in keeping here. Law means three enterprises, (1) private practice court and criminal, real estate, corporation, ordinary suits from divorce to negligence; (2) law-

making in city councils, county commissionerships, legislative service in State and nation; (3) the judicial offices. We might even add diplomacy and executive offices, which are usually entrusted to lawyers. The **ministry** means preaching, parish work, missionary service, institutional church direction, platform speaking, and periodical writing. **Medicine** includes dentistry, general and other surgery, therapeutics, care of chronic invalids, of the insane, of defectives, direction of community sanitation, public instruction in magazines and from the platform. **Journalism** includes, broadly considered, managing and writing for dailies, weeklies, monthlies, annuals, all the work of the reporter and the publicist, from pamphlets to ephemeral "current literature." **Engineering** includes bridge-building, road-making, surveying, construction of houses, offices, shops, libraries, and all other architecture, electricity, sewage and water and heating systems, even the planning of cities and harbors and railroads. But **teaching**, which is bigger than any other of these professions includes:

1. Preparation for livelihood of all citizens including preparation for each and all of these other professions.
2. Kindergarten, elementary school, high school, academy, seminary, technical institute, and all university instruction, city and State superintendencies and college presidencies.
3. Therefore, imparting any and every kind of knowledge, science, art, craft, that any of the children of men need.

But as the great bridge cannot stand unless its towers are firmly planted upon bed rock or immovable clay or other permanent part of the substantial earth, planted deep and wide, so no man or woman ever truly succeeds and nobly serves in teaching who does not know the homes of the American people.

The Child Belongs to the Family.

We are all the children of homes, the offspring of families. The exceptions are too few for us to consider as important factors in American life.

One of my own little children was once asked by a stranger,—
"I suppose you are your mother's boy?"

"No," he answered promptly.

"Oh, then you must be your father's boy?"

"Naw," he answered promptly, but more rudely. "B'long to de family."

And once when I was praising a poverty-crushed girl because she took home so many books from the school library, she said to me, "I haven't time to read 'em all. But, Pa, he reads some, and Ma reads the others; and they tell me about 'em."

It was not many years before the school library had helped an entire family to get out of poverty. It made them intelligent.

A good school indeed teaches far more persons than the individual pupils in it. It does this by reaching homes and families. Few individuals rise in the world to stay up who do not rise with their entire families. Otherwise, sooner or later, their brothers and sisters and other kindred drag them down again.

The Education of Families.

It is perhaps hard for the young teacher or for the older teacher who was perhaps not so fortunate as to have brothers and sisters to realize that ten or twenty years go fast; and that he is educating wives for husbands, husbands for wives, and little children to come whom perhaps he will never see. But all of us who are old and who have had brothers and sisters and who have been able to revisit the scenes of our early labors know many, many persons to whose success we perhaps contributed and others whose failures or perhaps did little to prevent. Some contrasts are startling.

Family A originated in Ireland; the parents were humble, industrious and inquiring, the father has never earned more than ten dollars a week. They came to live in a city with unusually good public schools. Eleven children were born to them; every one of these children is now grown up. Two are school principals. Eight are married. There are already twice as many grandchildren. Family B originated in Russia; of the Hebrew faith. Every one of the eight children is a success in life. The old father says that the American public school has done this for him and for them. Family C is of colonial descent in New England. Six children grew up, of whom even the youngest is now in middle life. Only one of the six ever married. She has one child. Family D is of colonial descent in a Southern State, resident in New York now. There were eight children of whom

only one has grown up. In these two families of C and D, there is wealth. Unlike families A and B, they were not of inquiring minds, but conceited. •

School teachers never reached them. The children had tutors and governesses or went to private school.

At a recent reunion of the alumni of a high school in which I taught a quarter of a century ago, these conversations occurred:

A woman of forty in radiant health said, "It was a course in physiology that kept me well, and made me marry a physician."

A physician, head of a hospital, said, "High school physiology made me a doctor."

A lawyer said, "You don't know it, but it was your course in political economy that led me to study law."

Overhearing these remarks, a married couple interposed, "Well, it was the economics that made me force my husband to have a country home, and the physiology that made him study medicine; and that's why we married."

A Poor School Is Costly; and Hostility to School Is Even More Costly to Families.

We may allow for the eloquent exaggerations of school and college reunions; but every man or woman of long experience in teaching knows that the school touches vital spots; and that a poor school or hostility to school is costly to families. Every one of us every once in a while runs upon some former school pupil who quotes something or other that we said or cites something or other that we did which we, of course, have forgotten but which the pupil treasured in memory as an influence upon his life.

Bread Cast Upon the Waters Returns After Many Days.

The woman school teacher who goes to some little social affair with her pupils of an evening may be quite sure that several decades hence some one of them will remind her of it. And the man teacher who takes his boys fishing Saturdays or plays baseball with them or umpires a game for them after school may hear the last of it from some one or more of them in his own remote old age. Nothing is ever lost. And very little is hidden for long. Teaching is a public life. For us, it is better to be known as

interested in the pupils and in their lives than as still absorbed in self-culture.

Herein is one of the exact differences between school-going and school-teaching;—the pupil goes for self-culture, and incidentally becomes socialized; the teacher goes for social science, and incidentally acquires personal benefits in money, in influence, in knowledge and in skill.

Interchange of Visits Among Teachers at School.

Every one who teaches well is always open to new ideas in teaching,—is always ready to consider new subjects, new topics, new methods, new devices, changes in organization or in program. It is unfortunate that teachers do not have more frequent opportunities to see “how the other fellow does things.” Considered from the points of view alike of common sense and of a philanthropic desire for the public welfare, it is unfortunate that teachers cannot visit one another more. In two of the four cities of which I have been superintendent, visits by teachers to the school rooms of one another were unknown; and in one of these four cities, a day’s visit out of town had never been heard of.

The boards (or committees) thought that each teacher was an ever-flowing spring of the water of living knowledge; that his skill was a finality; and that it was robbing the taxpayers for him to “lose a day.” In one instance, two school-buildings were side by side. In one of them was a kindergarten whose pupils went to the first grade in the other building. Yet the first grade teacher in five years had never been able to visit the kindergarten so much as ten minutes in all that time. In another instance, a teacher had taught eighth grade for twenty-seven years in one room without missing one day. In two cities of which I have been superintendent, no general meeting of the teachers to hear educational matters discussed had ever been held; and in one of those cities,—a large city,—no one could remember that even district or grade meetings had ever been held in any district or for any grade.

Now it is quite as impossible for the rural teacher, or for the urban grade teacher, of his or her own motive, to arrange to visit other schools as it is for him or for her to change the text books to-morrow or to get the toilet arrangements improved. But he

hears all the time or reads in the school periodicals of new subjects, topics, methods, devices, organization plans, program changes, for there is a "free-masonry" among teachers that is just as wonderful as the intercommunication of the prisoners in a penitentiary. For all their separate cells and locked doors, the inmates know immediately what is going on elsewhere. Much the same is true of our separated and isolated teachers.

What Is Better Than My Way?

One hears that one's own way is not the only way; but is the new way better? Let us consider for each and all the subjects of the elementary school and high school one or more points of continuance or change.

Kindergartens.

Is the kindergarten desirable? Should even the one-room teacher in a country school try to do some kindergarten work with the children under six years of age? These are two questions, not the same and yet related. And what in essence is the kindergarten? The answer will help answer the other two questions.

The purpose of the kindergarten is to afford an easy and an educative transition from the mother-protected home-life of the little child, from his perfectly spontaneous play and sport, from his wandering activities, his day-dreams and amusements, into teacher-stimulated school-life for definite aims, which are primarily to acquire certain school-arts and certain school-habits, and secondarily to acquire certain general ideas about the world and us, its people, with our cultures and arts and adult habits and notions. To accomplish this purpose, the kindergarten uses several definite sets of materials and devices.

First, the kindergarten tells stories and myths, teaches poetry and other memory gems, inculcates certain ethical ideas and insists upon certain modes and items of conduct. In this respect, the kindergarten by intellectual instruction informs the child about society.

Second, the kindergarten shows the child how to convert his free activities into definite lines of games and of occupancy. From the point of view of his activities, this is one single enter-

prise; but from the point of view of what the child actually does, it is two different things, viz.—organized and directed games, and, second, definite occupations, mostly for the hands. The games and occupations are numerous and various; but the most appropriate are always those like the games and occupations of the neighborhood, though others must at times be introduced for purely pedagogical or educational reasons.

Third, the kindergarten teaches music,—both music that goes with the ethical lessons and music that goes with the games and occupations. Kindergarten music should be good as music and good as the carrier of useful ideas or of pure sentiments.

Fourth, the kindergarten teaches the geometry of the world and some of its arithmetic in cubes and balls and otherwise and the colors as well as the forms of objects. When Froebel invented the kindergarten, because he meant it for children from four to eight or even nine years old, inclusive, he made this fourth aim his first and primary aim.

As a superintendent of school systems, I have never had a city without an ample supply of kindergartens; but I have visited many cities, villages and rural schools without kindergartens or kindergarten work. In some States, children cannot go to school until they are six years of age. For nearly all six-year children, most of the kindergarten work as outlined above is too easy; and much of it is wasteful. But for nearly all children in America who are but four and a half or five years of age, kindergartens are very helpful and therefore desirable.

Three kinds of classes of children should go to kindergarten by the time they are five years old.

A. Those who have no mothers or whose mothers have no time and energy to look after them. This includes careless, well-to-do mothers as well as poor and overworked mothers and invalid mothers.

B. Those who are born unusually slow and dull.

C. Those who are born unusually quick and bright.

But average children whose mothers have time and intelligence and energy and desire to help them at their play and to oversee their activities from minute-to-minute are as well off at home as in the kindergarten. In some communities, such children are not numerous. Children of such mothers are perhaps

as well off if they do not go to school at all until they are nine years old.

The questions, however, whether a rural school teacher should try to add kindergartening to her many other program-items or whether an urban graded school teacher with the smallest children, many under six years, should divide her time between primary and kindergarten work are to be answered in the light of the statistical facts.

A one-room rural school may have four children under six, three from six to nine, and four more from ten above. The teacher can certainly find some time for at least a little work in the second and third kinds of kindergarten activities. But the school may have only two children under six, seven from six to nine, and ten from ten years above, with perhaps two who used algebra and Latin of high school grade. Such a teacher should not try to do any real kindergartening other than occupation work and that along primary lines.

The case of the teacher with a class of beginners in an urban or a rural or consolidated or union school, is similarly a question of relative members. As a general principle, kindergarten is demanded for children under six; but the proviso is that children over six must not be thrust aside unfairly.

The Teaching of the Several Kinds of Reading.

Is there a best way to teach reading? Is there a better way than the one now in use in the school of the reader of this article.

Reading is four several and distinct affairs. Until one understands this, one cannot get far in the theory and practice of reading.

First, reading is recognizing the visual symbols for aural or auditory sounds and translating them into the properly associated ideas or notions. Reading is from eye to ear to mind.

Second, reading is converting these visual symbols for aural or auditory sounds into the lip, mouth, tongue and larynx movements that in turn make the same or at least recognizably similar aural or auditory sounds. Reading is from eye to ear to mouth not always via a fully thoughtful mind.

Third, reading is good elocution,—such as interests the listeners. Reading is thought-interpretation to others.

Fourth, reading is the gateway to, and in a sense, the field of, literature. Reading opens up the thinking of the world and sets us to thinking.

The best way to teach reading is the way that most quickly and surely brings the child into reading considered from all four points of view. It is but repeating what has been said before to say here that this best way to teach reading is the way that causes the child to exert his own best endeavors to learn to read,—that sets his own self-activity and keeps it going. Yet so greatly do children differ that some wish to learn to read because they like to use their eyes and ears and powers of observation and sense-understanding. Others wish to learn to read because they wish to be able to read aloud and afterwards to use the words that they have learned. Still others wish to learn to read so that they can recite interestingly. And yet others wish to learn so that they can think about the ideas that the reading-books and other printed matters give to them.

The first of these need phonics. The second need word-drills. The third need conversation about the “stories” of the books. The last will soon develop as “silent readers.” The best method, therefore, is the method that best fits one’s own grade and kind of children. Schools with many foreigners need plenty of phonics and word-drills.

There is perhaps no better device for reading for beginners than having the child tell what in general his passage means before he reads it. One must not keep children at the same story too long lest interest die; but also one must have the phonic elements pronounced well lest throughout life the articulation be slovenly.

Keep lists of hard words upon the blackboards. Words may be hard (a) because of their phonic elements; (b) because of their spelling; (c) because of their meaning. These should be talked about and their reading practiced.

Teachers in teaching a reading-lesson should not have their own books open in their hands, but should expect the children to try to interest them. Reading is badly taught (a) when the children stumble and flunk upon words; (b) when they read monot-

onously; (c) when they read in a rapid, inarticulate jumble; and (d) when they read as though they do not care about what they are reading,—which often is the fact.

Trial, practice and drill cure the first fault. Encouraging the good readers, setting good examples for the poor readers, and holding conversation about the material cure the second fault. The teacher herself by insisting upon slow and proper speech can soon right the third fault. The use of better selections, additional information about the subject and bringing in fresh material to be copied upon the blackboard or passed about from one to another cure the fourth fault.

Let no conscientious teacher be discouraged when her children read badly. Reading is the most important subject in the curriculum, the vade mecum for nearly all others, and generally not only the worst taught but among the least appreciated by parents and pupils alike. Why? Because it is more or less intangible and, therefore, hard to measure. Yet in some schools in States far apart from one another, I have heard delightful reading. I never heard good reading, however, in an otherwise poor school. It seems to be the cap sheaf of other good performances; and yet is, in fact, I suspect the inspiration to those good performances.

Above all else, whether you are a history teacher in a high school, or an eighth grade teacher with twelve subjects to teach daily to a large class trying to prepare for a high school, or a one-room rural school teacher with sixty children in nine grades,—some such teachers have eighty children,—or a two-room rural school teacher with the primary room and as many children, do not do this:—Do not let any class even once read anything in a slouchy manner. A bad reading exercise is evidence and cause of a veritable school-miasma. Ten children reading humdrum while the teacher with book in hand sits and sits waiting to get through are a pitiful sight. Far better that they should not read at all.

The Teaching of Handwriting.

With respect to writing, one item is notable. At four different epochs in life, a boy may learn to write well. He may learn at the start in school when he is six or seven years old; and he may

always write well thereafter. This comes from natural imitation of a teacher's good models. Some children are incapable of such imitation, and some teachers do not write well. He may learn in later childhood, (say) at twelve years of age. This comes from drill and get more drill in patience and persistence. Or he may learn in the first or second year in high school or when at fifteen or sixteen years of age, he finds that he must write well in order to get and to keep a certain kind of position; or perhaps because in adolescence, he has set himself a new standard of excellence. Fourth, he may learn when he is a young man; in this epoch, to write well is hard indeed for the person who hitherto has not cared.

Such are the good writing epochs; and this means that it is not often profitable to try to teach good writing at other periods of the child's development. The interest in writing seems to come in periodic curves, and it never comes at all to some. With no amount of drill and even of personal effort could some boys or for that matter girls, ever learn to write well.

One who writes well needs these qualities, (a) good eyesight or poor eyesight perfectly corrected by glasses or even by eye surgery; (b) a stable nervous system with an even flow of nervous and muscular energy; (c) an eye for the esthetic; (d) a good conscience with understanding of the rights of the reader of handwriting. A good writer must have all these qualities—and not many persons, certainly not many school boys have them. Finally no one ever learned to write well who did not have good models; and most good writers had good teachers of writing.

There are two requisites for good handwriting, first, legibility, the requisite for the reader, and, second, rapidity, the requisite for the writer. Unfortunately, very rapid writing is seldom perfectly legible; and vice versa, it is almost impossible to write rapidly when trying to be so legible that no one can mistake the writing.

It is generally true that what one does well one does rapidly; but this is not true of the fine handwriting of an expert. The care that causes every letter to be so well written that when one looks at it alone through a hole perhaps in a piece of paper laid over the writing, the letter cannot be mistaken, delays speed.

But between these requisites, legibility and rapidity, there is

an absolute choice. Legibility is essential to good writing; but rapidity is not.

As to attractiveness of appearance—penmanship as compared with good hand writing,—we of the school world have come to agree that except as it comes with a free arm movement and clearly distinguished letters of uniform standard heights, it is not worth considering. Beauty of handwriting is for specialists.

Some slant, slight, and to the right is the order of this day. Seventy-five degrees is commonly assigned; but all pupils are not to be required to employ the same slant.

Left-handedness, Right-handedness (Dexterity) and Ambidexterity.

Shall left-handed pupils be allowed to write with their left hands?

What is left-handedness? Upon consideration, I came to the point where I wished really to know, and carefully examined over one thousand children in primary and lower grammar grades.

The brain, of course, has two hemispheres. The limelight (as it were) of consciousness usually rests upon one hemisphere, and that the left; and because the nerves cross in the medulla oblongata and midbrain, this means that most of us are right-handed and right-legged. This is perhaps the psychological result of a physiological cause. The better lungs and the whole of the liver are upon the right side; in a sense, these are organs that think chemically. The heart thinks only in a muscular, musical, physical rhythm.

My tests showed the following results, viz.—of over 1000 children,

2% were left-handed.

3% were ambi-dextrous, and

95% were right-handed.

There are all degrees of left-handedness and of right-handedness. Some few whom I so classified were almost ambidextrous.

Of so-called left-handed children, before I made the investigation, almost one-half were ambidextrous, and three were in truth right-handed. The tests were these:

A. Let the child write with each hand upon the blackboard,

—one set of experiments using the left hand first, and another set, using the right hand first. Use the same words for each hand.

B. Let him draw circles, ovals, squares, and straight lines.

C. Try both these tests with pencil and paper.

D. Similarly try figures on blackboards and on paper.

One child of nine years told me that his "Papa told" him that he was left-handed for letters and right-handed for figures.

E. Try for several days various surprises—such as handing out articles for the children to take. Watch their hands.

F. Notice which way the children turn upon their heels when free to choose. Right-handed children swing opposite to the hands of a watch; left-handed children swing with the hands of a watch.

In the above writing and drawing, the weaker hand always writes more slowly and with more trembling lines. Speed makes for straight lines; energy does also.

The few doubtful cases are either ambidextrous or ambisinistrous. A so-called "left-handed" child is often simply clumsy with each hand. Clumsiness means a bad muscular or a weak nervous co-ordination.

Actually left-handed children, as a matter of justice and for the sake of their own best success in life, should be encouraged to write and to work generally with their left hands.

The scale-test shows that usually the right hand of right-handed persons weigh more and can lift more than the left hand.

At fifteen years of age, one boy (right handed) could hold out at arm's length a 16-lb. weight with his right arm and only 12-lb. with his left. The hand dynamometer showed 90-lb. for his right grip and only 60 for his left. He wore an 8-in. glove on his right hand; but a 7¾-in. glove fitted his left better. And his right hand and arm, resting passively upon the scales, registered 6 oz. above the left. He could hop upon his right leg nearly 7 ft., and barely 6 ft. upon his left, the difference being 11 in. In general, he was right-sided by fully 15% superiority over his left hand and side.

Yet he wrote with his left hand as well as the average boy in his class did with his right. He said that he "tried twice as hard and wrote half as well" with his left hand as with his right.

At any rate, his reaction time via his left hand was twice as long as via his right hand.

Better school teaching involves answering such questions upon data carefully gathered.

Boys say that they "cannot write well," "cannot sing at all," "hate drawing," and make other similarly sweeping statements, most of which can now be investigated more or less scientifically.

I have seen more than one boy who "could not tell one note from another" (so he said) get into the tide of a popular high school orchestra and almost before he knew it be playing a 'cello or a flute; and in one instance, a girl of the same line of speech became in two years "first violin."

What Happened in One Boy Who Was Measured and Convinced.

Physiopsychological tests land many a boy's theories about himself in ruins. One very lazy boy thus tested was gotten into a high school basket ball team as half back; and the team took sixteen consecutive victories in an interscholastic league, many of the teams coming from larger schools. This future half back and athletic hero mistook his own laziness associated with a not unusual adolescent shyness for physical weakness. The tests that told the truth even to him included some compulsory running, weight-lifting, rope-climbing, and competitive spelling and writing for speed. They showed that mind and body both were unusually quick and strong.

In teaching to write the good teacher will remember that the accessory muscles develop slowly and long after the fundamental muscles. Few five year old children can grip a pencil with their fingers. Third grade is early enough for penholders, pens and ink. Until the child is at least seven years old, much of his writing should be upon the blackboard and large,—the one-space letters being at least four inches high and better six. The pencilled one-space letters on paper should be nearly an inch high. Do not ask for standard size letters until the child is nine or ten years old. Uniform height may be asked for a year earlier. And never expect a class of ten-year children or older to write letters of the same height and length. Seek only legibility and rapidity.

It is sometimes said that school exercises in writing should never exceed so many minutes a time or so many different periods

a day. There was a rather long season in my own professional life when I believed these prescriptions; but closer study of individuals has shown me that children differ greatly. In a general way, most children at eight years should not be kept at writing over ten minutes at a time or children at fifteen years over twenty-five minutes. And in a general way, it is not well to give over two exercises a day in writing. But for nervous children, these periods are too long; and for heavy, stolid, muscular children, they are too short.

Should, then, all children in a school study each the same subjects or work at the same exercises the same lengths and numbers of times? We used to say, "Yes," and now we say, "By no means. All good teaching considers and arranges for individuals according to their powers and needs."



Live-Wire Arguments

From

State Superintendents of Education

[“A Comparative Study of Public School Systems in the Forty-eight States” was published in December, 1912, by the Russell Sage Foundation. The States were ranked educationally as they were believed to meet ten specified tests of efficiency. Believing that the Superintendents of Education in some of the States would be willing to express themselves in reference to the report, the editor invited them to do so for the benefit of the readers of Educational Foundations. The replies will be published from month to month. All of them contain interesting statements and the series will reflect the spirit of present day education in America in a manner hardly possible in any other way. No person sincerely interested in our educational progress can afford to miss these contributions. Our thanks are due and are publicly offered to these champions of the schools who thus favor us with their opinions.]

This Month

Virginia—*M. P. Shawkey*

Missouri—*W. P. Evans*

Michigan—*L. L. Wright*

Educational Efficiency in the State of West Virginia

BY M. P. SHAWKEY,

State Superintendent.

The report of the Russell Sage Foundation giving the relative standing of the forty-eight states of the union in educational matters is an interesting document. I consider it also a very valuable one. Comparisons may be odious oftentimes, but they are also frequently illuminating. Naturally West Virginia does not feel elated over the showing made in this report. Indeed, I think we have grounds to claim in some respects a better standing than is given us, though on the whole the report would seem to be as fair and accurate as could be expected under the circumstances; and when I say under the circumstances, I have reference particularly to the scope of the work and lack of uniformity in statistics together with the inaccuracy that prevails generally in such statistics.

To cite an instance or two in which our state has apparently been misrepresented, I would refer to the table on page 21 showing the number of pupils attending high schools. That table reports that for the year 1910 this state had 6,064 pupils in her high schools. The explanation is made that the list includes not only public but "private" schools. It does not seem to include normal schools, and of these West Virginia, though small, has six, which in prior times, and in 1910, were devoted largely to secondary work of the class usually done in high schools. For that year our actual high school attendance was 4,900 and the high school students enrolled in normal schools numbered 2,000, which added to the 1,164 credited by the foundation report to our "private" schools will give us a high school attendance of 8,064, to which should probably be added about 200 additional colored pupils in the three institutions supported by the state. Such a revision of the figures would materially improve the showing that the state makes in this respect.

On page 9 of the same report a more serious and less reasonable error is found, to the detriment of West Virginia. Under the head of expenditures for schools West Virginia is credited with \$3,700,290, whereas the total expenditure for elementary and secondary schools maintained by the various districts and independent districts of the state was \$4,542,611, to which might reasonably be added \$200,000 more which was appropriated by the state directly for the maintenance of schools of secondary grade.

The main point I wish to emphasize in this connection, however, is the fact that the statistics for West Virginia for 1910 or any year prior thereto are now obsolete. West Virginia is unique as well as young. She has sometimes been described as the only "successful seceding" state. In an article in a leading magazine a few years since her great eastern plateau section was described as "the land where time has slumbered." She is one of the youngest states in the union, but is hedged about on every side by the oldest states in the union. She is this year celebrating her semi-centennial jubilee. Her unbounded wealth of natural resources was so securely locked in by her rugged hills and towering mountains that the people of the earlier days preferred to move on to the open plains of the West rather than to undertake the difficult task of developing her mines, fields and forests. But a new day has come. The census shows that during the last decade her population increased 27.4 per cent., which is a larger percentage of increase than two-thirds of the states of the union can show, while some of her towns and cities actually set the pace in rapid growth for the entire nation.

Amidst the din and clash of industrial development, the building-up of a thoroughly efficient school system has been no easy task, but on that score also we can quote figures of which we need not be ashamed. A few suggestive ones only may be presented here. First, is it not significant that though our population is largely rural and is distributed over great areas, much of which is rugged, mountainous and cut up by dashing mountain streams, yet no child in West Virginia lives at a greater distance than three miles from a school house and most of the children much nearer than that? Recent industrial developments have brought into the state large numbers of foreign-born peo-

ple, many of whom are uneducated and some of them with a natural tendency towards violence and crime. To build up an effective system of elementary schools that would reach not only the sparsely settled rural communities, but also the congested mining sections requiring unusual efforts, the state several years ago provided for the examination of teachers under state authority and prescribed a standard of qualification that will compare favorably with even the oldest states of the union. It has not only done this, but it has increased the teachers' pay and has provided for local rural supervision by districts in a large number of cases. During the present year 20 per cent. of the rural teachers of the state have been under such supervision and the results show a marked increase in efficiency. The state has also joined with the rural communities in a plan for building and equipping standard high schools. Ten years ago we had about a dozen high schools while to-day we have more than ten dozen with others coming on rapidly. Referring again to the statistics of 1910 included in the Sage Foundation report we find that we enrolled in our regular high schools 4,900 pupils that year. The high schools of the state during the present year have enrolled 8,200, or a gain in high school attendance of 47 per cent. in three years. At the present time there are between twenty-five and thirty new high school buildings in some stage of the process of construction. These are largely of the rural or village type, though the aggregate cost of the buildings amounts to about \$1,300,000. The work of these schools is under the direction of the State High School Supervisor and is standard in every way. The number of high schools accredited by the Southern Commission on accredited schools is greater than that in any other southern state except Texas, whose slight excess over West Virginia may possibly be excused on the ground of area or on the area of ground.

Our state normal schools, which were formerly little more than local high schools, have developed into real teacher-training schools and have provided a course covering two years of professional work in addition to the four years of standard secondary work. The effect of the substantial development of our secondary system is reflected strikingly in the attendance at our State University at Morgantown. In this institution the Freshman

class which matriculated last September was twenty per cent. larger than the largest previous class in the history of the institution. It was not only larger but it was better prepared. There is every reason to expect that the same growth will continue this year and next and so on. It will not be limited to the State University, but will show also in the denominational schools of the state of which we have several very excellent ones.

We do not claim to be a "finished product," but we are actively engaged in the making and there is abundance of work for every well-trained teacher in the state. We should like to invite the Sage Foundation people to come back this year or next or any other time and take a new invoice.

A handwritten signature in cursive script, reading "M. P. Sharkey". The signature is written in black ink and is positioned in the lower right quadrant of the page.

Missouri's Recent Educational Progress

BY WILLIAM P. EVANS,
State Superintendent.

A sketch of the progress of Missouri in education recently would deal largely with the readjustment of the laws in order to provide a new and modern frame-work adjusted to the latest thought and experience in regard to school organization. The educational leaders of the State felt that the time had come for a readjustment and have presented their views with such force to the law-making powers that several very important measures have been enacted in the past two years. This legislation may be roughly treated under three general heads or principles. First—A Wider School Unit. Second—Extension of the Public School Idea. Third—An Uplift in Standards of Efficiency.

The school unit two years ago was chiefly local. It is now generally recognized that this unit leads to great inequality in school opportunities, and in order to equalize these opportunities it is necessary to extend the unit. This may be done by using the township, county or state as the basis for school taxation.

The public school idea that the strong shall help the weak and the rich shall aid the poor is related to the preceding principle, but is sufficiently developed in itself to justify a separate head. To raise the standards of efficiency one may consider the teacher's efficiency or the efficiency resulting from a higher degree of local effort. By taking up these three heads separately it will be interesting to note the work that has been done in the legislature and as a result of it, although some of the laws passed will be found to touch all of the various heads.

No progress has been made toward utilizing the county as a unit for school taxation and administration, but much has been done towards State support of local effort, State aid is now extended to weak districts, where the valuation is so low as to furnish inadequate funds under the limitations of taxation caused by the State Constitution. There is a provision now that every

rural district may have an eight months' term of school by means of State Aid, if the local funds are insufficient to provide the necessary funds after the maximum tax has been levied. Consolidation of school districts also provides means of extending the unit. A law on consolidation was passed which promises to be a very good one and under which quite a number of districts have been organized in the short time since it came into effect (two months).

A free text-book law was also passed authorizing school boards to use part of the Incidental funds for the purpose of purchasing text-books for use of the public schools and providing State Aid to assist in carrying the additional burden. For many years the State has appropriated a part of the State funds derived from franchises, licenses, direct taxation and other sources to the aid of the schools of the State. It will be seen from this brief summary that progress has been made toward widening the school unit and it is confidently expected that soon a high school furnishing opportunity for broader secondary training will be found within reach of every boy and girl of the State.

The idea of the free public school has become thoroughly established in Missouri, although for many years the old aristocratic notion that the free school is a charity school prevailed in many communities. The beautiful public school buildings going up in many of the old aristocratic communities, the magnificent high school equipment furnishing opportunity not found in any of the old academies testify to the firm hold that the public school has obtained. To convince the law-makers of the State that they have any duties in connection with the promotion and equalization of opportunities was recently accomplished. For many years the apportionment of public school funds was based upon enumeration—whether the children enumerated were in school or in some other place. Now, however, the apportionment is based on the local use of the money, taking into account the number of teachers employed and the number of children in attendance. No other facts, than these two, enter into the distribution of State school moneys now except the special aid extended to those that have special needs. The further appreciation of the public school idea has brought about the above mentioned aid to weak rural districts by which the State acknowl-

edges its responsibility to provide for the education of all its citizens. The same principle has led to the enactment of a law aiding weak high schools, but the aid is based on the very exacting condition that the local community shall have first exhausted all the means at their command under the limitations of the Constitution for the promotion of their own schools.

The law for free text-books is just as easily defended as the law for free school houses. The reasons are practically the same for one as for the other and the sentiment in the State was ripe for the enactment of this provision, although the State Aid for free text-books which was to be based on the taxes paid by the foreign insurance companies has been depleted very much on account of the war at present between the foreign insurance companies and the State officials.

Another measure enacted by the recent legislature relates to the age of those eligible for public education. Formerly only children of six might be admitted. Now children of five may come in, thus extending by one year the school period of those children who are early taken out of the schools to assist in the family support. The same law gives local communities the right to extend school privileges to those over twenty years of age, in this way making it possible for foreigners and others who have been neglected to rectify their shortage in education by attendance at school beyond the former limit of twenty years of age.

It will probably be thought that all of the legislation has aimed at an uplift of standards of efficiency, which is no doubt true and practically all of the laws enacted touch this uplift in one place or another. In regard to the efficiency of the teacher a law was enacted two years ago requiring a progressive increase of high school preparation for the higher grade of county certificate before the candidate can present himself for examination. After 1918 a full four-year course will be necessary to secure a second grade or a first grade certificate. The same law requires the State Department to grade the papers for all of the candidates for first grade county certificates.

The last Legislature realized the great need for more well trained teachers and instituted a teacher-training course in high schools to be recognized by a state certificate good in any of the rural and elementary schools of the State. This course is by law

required to include a year's training in agriculture. We shall at first have difficulty in providing the high school teachers of agriculture, but the Normal Schools and the State Agricultural school will soon have that need provided for and then in a few years we shall have a great number of competent teachers for the rural schools who have had sufficient preparation in agriculture to handle that subject intelligently. In making this provision the legislature realized that the normal schools and colleges of the State are entirely unable to cope with the great demand for trained teachers and extended State aid to the amount of \$750 annually to the high schools offering this course.

The requirements for the inauguration and the management of the course are wholly in the control of the State Department, which was provided by law with an inspector of teacher-training course.

Efficiency in administration is greatly in need of improvement, and the State has provided two means to assist in solving this problem. A provision was made for the calling of conventions of school boards in each county and for the payment of the expenses of those attending the convention. It is expected that this will have a pronounced effect in making the school board members realize their duties and responsibilities, and in finding the best way to reach them.

Another very important means to increase the efficiency in administration is the distribution of State funds on the basis of number of teachers employed and the total days' attendance of pupils. This creates a very interesting premium on efficiency, and has had a very remarkable effect. The law has now been in operation so short a time that the statistics gathered are for one year only, which is rather insufficient for general comparison, yet it will be interesting to note that in the one year the total attendance of pupils increased 2 per cent.—which corresponds to a total of about three counties of the State in one year. This provision is leading to longer terms and to better attendance. There is a degree of rivalry for attendance of children that is extremely gratifying to students of educational progress. It was foretold when the law was enacted that it would be a means of enforcing the compulsory attendance law by placing a premium upon attendance rather than a penalty. The outcome in the matter justifies the anticipation.

After all, the principal problem is to secure the highest degree of wise local effort. None of us cares to remove any more responsibility from the local community than the best interests of the State demand shall be done. Consequently every incitement to local effort is a step in the right direction. It must be confessed that there are thousands of communities in Missouri that have only been feebly roused by the various inducements placed before them for greater organization at home, but the contagion is spreading so rapidly that only a few years will be needed to bring the whole State into a degree of educational ferment that will redound to the advancement of the State. To encourage this, the apportionment law has been cunningly devised and the aid for consolidation has been based on a considerable degree of local initiative, so also the aid to weak rural districts and to weak high schools.

The new law in regard to Teacher-Training in High Schools has been another incentive of far-reaching influence. The difficulty in finding teachers with the required preparation has cut off a great many high schools this year, but the desire to keep up with the procession is prompting districts to put forth every means within their power to get a better grade of teachers in order to reach approval—taxing themselves higher in order to get the required room and equipment, is causing districts to search throughout the length and breadth of the State to find approved teachers of agriculture, who are just now at a premium, and the problem of finding approved teachers to give the pedagogical training is another very serious question. In organizing the course, the State is demanding that they shall have sixty hours of college and academic preparation, and thirty hours in professional training and shall have had three years' experience, part of which shall have been in rural schools, the last provision is causing more trouble than any of the others. This discussion will convince you that Missouri is moving and that applicants for the place of 32nd in the rank of States educationally will soon find a vacancy waiting for them.

A handwritten signature in dark ink, reading "W. F. Evans". The signature is written in a cursive style with a large, looping initial "W" and a long, sweeping underline.

The Voice from Michigan

Luther L. Wright, Superintendent of the Department of Public Instruction for the State of Michigan, writes:

"We are in receipt of your letter concerning the comparative study of education in the forty-eight States. It would be very hard to state why Michigan ranks seventeenth in the list. I am inclosing a short history of the sources of the school funds in Michigan. I believe that in this respect Michigan differs from any other State. The table showing the per cent. of revenue derived from various sources would hardly indicate the benefit that Michigan schools derive from the permanent school fund."

PRIMARY SCHOOL INTEREST FUND OF MICHIGAN.

Perhaps the most interesting thing concerning the Michigan school system is the source of revenues. In the comparative table Michigan ranks ten. It shows 51.9 per cent. derived from local taxes, 38.6 per cent. from State taxes, 2.5 per cent. from permanent fund, 7 per cent. from other sources. Figures in this case are somewhat misleading. The total net receipts for 1910 were \$13,888,691.00; the amount of primary school interest fund for 1910—by the State constitution a permanent fund—\$5,707,562.00, or 41 plus per cent. of the total. The amount apportioned amounts annually to about \$5,000,000.00, ranging during the last six years from \$5 to \$12 per capita.

Previous to the organization of the Northwest Territory, the portion of the country of which it was composed was claimed by Virginia, Massachusetts, Connecticut and New York. The demands of Maryland and other smaller states led to the cession of all these claims to the United States. This was the first property over which Congress exercised absolute control. It was a vast territory of unknown value, subject to the action of Congress without the action of the States. The land was to be converted into revenue. In 1785 an ordinance was enacted which provided for the survey, dividing the entire territory into townships,

six miles square, and the sub-division into sections. The following was also provided:

"There shall also be reserved the lot No. 16 of every township for the maintenance of public schools within the said township." Herein was the origin of the primary school fund in the five great States carved out of this territory. Article 3 of the Ordinance of 1787 confirmed that of 1785 in the following words: "Religion, morality and knowledge being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged."

An act of Congress in 1804, making provision for the sale of lands in the territory, again reserved section 16 in every township. It is evident that the original idea of Congress was to give section 16 for the benefit of education in the township only in which such section was located. In the older States this caused much difficulty and many complications. There was no equality in the system because of the difference in value of section 16 in various townships, in some cases it being worthless. On the other hand many valuable sections were sold for a very small amount.

An article incorporated in the first State constitution provided as follows:

"The proceeds of all lands that have been or hereafter may be granted by the United States to this State for the support of schools, which shall hereafter be sold or disposed of, shall be and remain a perpetual fund; the interest of which, together with the rents of all such unsold lands, shall be inviolably appropriated to the support of schools throughout the State."

By this article the school lands were conveyed to the State to be held in trust for the townships, thus preventing the complications caused in other States by the transfer of the school lands or section 16 directly to the townships. The apportionment derived from the income of school funds has continued to operate as a stimulus to school districts.

For the use of this money the State pays into the school fund an annual interest of seven per cent.

In 1812 Congress set apart two million acres of land in the territory of Michigan as a bounty for men who should enlist in the war. Agents reported these lands as "unbroken swamps."

Because of this report bounty lands were transferred to other States and these Michigan lands amounting to five million eight hundred thirty-eight thousand seven hundred seventy-five acres given to the State. The legislature in 1858 and 1887 appropriated all moneys received from the sale of the so-called "swamp lands" to the primary school fund. These moneys the States use and pay five per cent. interest on the same. Later all escheated lands and funds from the sale thereof were appropriated to this fund.

A provision of a later constitution specifying taxes should be added to and constitute a part of the primary school fund prevents the payment of this interest from being a burden as it would in case a direct tax were assessed on the property of the State. An amendment to the constitution in 1900 gave the legislature power to assess certain corporations according to their cash value, this being applied to the primary school interest fund. After litigation a decision of the Supreme Court of the United States in favor of the States against railroads has added to the school funds an amount which has been of great benefit to the schools.

The fund has been preserved intact for school purposes, the only change making a fairer and more equitable apportionment. No attempt has been made to divert these funds or any portion thereof to any other purposes.

L. L. Wright.

Book Department

I. September Book List

II. Literary Snapshots

III. Book Review

I.

Ideals and Democracy—An Essay in Modernism. By Arthur Henry Chamberlain, formerly Dean of Throop Polytechnic Institute, Editor Sierra Educational News. Cloth, 185 pages. Price \$1.00. Rand, McNally & Company, Publishers.

"The gist of the message is the growing responsibility of the schools in character-building."

Southern Literary Readings. Edited, with Introduction, Notes, Biographical Sketches, and Some Thought Questions, by Leonidas Warren Payne, Jr., Adjunct Professor of English in the University of Texas. Cloth, 478 pages. Price 75 cents. Rand McNally & Company.

A wonderfully interesting and useful book at a wonderfully small price. 75 selections from 34 authors. The Southland at its literary best—and there is nothing better.

For the Story Teller—Story Telling and Stories to Tell. By Carolyn Sherwin Bailey. Price \$1.50, postpaid. Published by Milton Bradley Co. Another book on an increasingly popular subject, written by an expert. Claims to give a new system of story-telling as related to child psychology. Really constitutes a complete and practical hand-book for all who seek to educate through story-telling. Valuable lists of books and stories.

Songs for Children. Words and Music by Dora I. Buckingham, Western State Normal School, Kalamazoo, Mich. Size 9½x12½. Price 75 cents, postpaid. Milton Bradley Company. Reminds one of the "Songs of Happiness" by the same publishers. Tuneful tunes and pretty words from "The Morning Sun" to "Taro San."

A Dickens Dramatic Reader. Scenes from Pickwick. Scenes

from Nicholas Nickleby, The Cricket on the Hearth, A Christmas Carol. By Fannie Comstock, formerly of Bridgewater Normal School. Price 60 cents. Ginn & Company, Publishers.

The book has a two-fold aim—to present portions of the works of Charles Dickens in dramatic form for use in the reading class and to assist in dramatic representation. Will undoubtedly win the popularity it deserves.

A First Book of Composition for High Schools. By Thomas H. Briggs, Instructor in English in Teachers' Training College, Columbia University, and Isabel McKinney, Teacher of English in the Eastern Illinois State Normal School. Price 90 cents. Ginn & Company, Publishers.

The embodiment of a new idea, placing emphasis on the qualities of good writing rather than on formal rules. Contains material for a two years' course.

Teaching of Arithmetic. By David Eugene Smith, Professor of Mathematics in Teachers' College, Columbia University. Illustrated. Price \$1.00. Ginn & Company, Publishers.

A popular non-technical treatment, appealing to all readers and designed to meet the needs of reading circles and of teachers in the elementary school. Begins with an interesting chapter on The History of Arithmetic.

The Latin Ladder. Introductory to Caesar. By Robert W. Tunstall of the Tome School for Boys. Price 90 cents. The Macmillan Company, Publishers.

"The Ladder is a compromise between the old and new type of beginners' books and an effort has been made to combine in one book the advantages of both types."

Chemistry and Its Relations to Daily Life. A Text-book for Students of Agriculture and Home Economics in Secondary Schools. By Louis Kahlenberg, Professor of Chemistry and Director of the Course in Chemistry in the University of Wisconsin, and Edwin B. Hart, Professor of Agricultural Chemistry and Chemist to the Agricultural Experiment Station in the University of Wisconsin. Price \$1.25. The Macmillan Company, Publishers.

Farm Arithmetic. To be Used with Any Text-book of Arithmetic or Without. By Charles William Burkett, Editor American Agriculturist, and Karl Dale Swartzel, Professor of Mathematics, Ohio State University. Illustrated. Orange Judd Company, Publishers.

Elementary School Standards. Instruction, Course of Study, Supervision. Applied to New York City Schools. By Frank M. McMurry, Ph.D., Professor of Elementary Education, Teachers' College, Columbia University. One of the School Efficiency Series, Edited by Paul H. Hanus. World Book Company, Publishers.

Aside from its association with the New York City School Inquiry, this book is indeed as Dr. Hanus claims in his preface, "A contribution to the professional resources of teachers and supervising officers wherever their lot may be cast."

Lake Erie and the Story of Commodore Perry. By Edward Payson Morton, Ph.D. 104 pages. Price 25 cents. McMinn & Gear, Teachers' Mail Order Book House, Detroit, Mich. One of The Great Lakes Series, for supplementary reading in the Fourth Grade. The tinted paper, brown ink, abundance of illustrations and captivating style of the story make this a book which will delight children and teachers alike.

The Home School. By Ada Wilson Trowbridge of the Home School, Providence, R. I. With an Introduction by Randall J. Condon, Superintendent of Schools, Cincinnati, Ohio. Price 60 cents. Published by Houghton Mifflin Company. One of the Riverside Educational Monographs, edited by Henry Suzzalo of Teachers' College, Columbia University. The "Home School" idea splendidly portrayed.

Choosing an Occupation.. A List of Books and References on Vocational Choice, Guidance and Training in the Brooklyn Public Library. Published by the Brooklyn Public Library. Single Copies may be obtained without charge on application to the Brooklyn Public Library, 26 Brevoort Place, Brooklyn, N. Y.

The New York Times Index, January-March, 1913. "The index is edited so that by means of subjects, dates, brief synopses, and full cross references to persons and related events, the work will be for all ordinary occasions complete in itself." 272 pages. To be issued quarterly. \$6.00 per annum, paper; \$8.00 per annum, cloth. Single copies \$1.50 paper, \$2.00 cloth.

Entomology. With Special reference to Its Biological and Economic Aspects. By Justus Watson Folsom, Sc.D., Assistant Professor of Entomology at the University of Illinois. Second revised edition with four plates and 304 Text-figures. Price \$2.25. P. Blakiston's Son & Co., Publishers.

II.

Literary Snapshots

BY MARY ELEANOR KRAMER.

The "Reminiscences of Augustus Saint-Gaudens," edited and amplified by his son, Mr. Homer Saint-Gaudens, will be issued this autumn by the Century Co., in two large volumes, with many illustrations showing Saint-Gauden's work, and persons and places associated with his life and character.

* * *

Miss Lillian Whiting has recently returned from a prolonged visit to Greece, where she went to obtain material at first hand for her autumn book of travel and description, to be called "Athens, the Violet-Crowned." She brought back with her a fine collection of pictures which will be reproduced in her book.

* * *

One of the greatest educational reference works yet issued is "A Cyclopedia of Education," edited by Paul Monroe, with the assistance of departmental editors, and more than one thousand individual contributors. Anyone who glances through this list of contributors will be impressed with the fact that the editor has induced many of the recognized educational authorities in this country and abroad to collaborate with him in the production of this great work. (Volumes III and IV, New York: The MacMillan Co.)

* * *

Mrs. Florence L. Barclay, sister of Maud Ballington Booth, the salvationist, better known as the author of "The Rosary," "The Following of the Star," and "The Mistress of Shenstone," is the mother of eight children. Her husband is the vicar of a small parish in England, and yet she holds that the novel does more good, and, likewise could do more harm than the pulpit. She thinks that nothing that could give the reader a lower plane of thought should come into the novel.

* * *

Robert Hichens is enraptured of Constantinople. Writing of this city in a recent issue of the "Century," he says: "When I think of Constantinople as a whole, as seen, say, from the top of the

Galata tower, set up by the Genoese, I think of it as the most wonderful, the most beautiful, and the most superbly situated city I have ever seen."

* * *

Gene Stratton-Porter's latest book of fiction is entitled "Laddie, a True Blue Story." The title really explains itself, because the story deals with true blue American human beings. The plot, which is laid in Indiana, and close to the heart of nature like all of Mrs. Porter's other books, deals with real simple-hearted true blue folk, who are typical of the best in this country. The publishers have given much attention to cover, binding and printing in this book; it is manufactured on a color scheme of blue, just as "The Harvester" was done on a color scheme of mellow harvest brown, and the effect is quite as beautiful and effective as was that of "The Harvester." All teachers who possess this writer's beautiful nature romances, "Freckles," "The Girl of the Limberlost," and "The Harvester," will give warm welcome to "Laddie." (Doubleday, Page & Co., Garden City, L. I.)

* * *

A useful activity for a society that is devoted to the memory of an author is that of the American Dickens League in endowing hospital beds for children. The first bed so endowed was dedicated recently in the Coney Island home of the Children's Aid Society, and is to be known as the "Little Nell Bed."

* * *

Mr. Edwin Bjorkman is preparing a volume on "Scandinavian Literature" for Messrs. Henry Holt & Co. Mr. Bjorkman contemplates separate treatments of Ibsen, Bjornson, George Brandes, Strindberg, and Jacobsen. There will be collective treatment of the lesser men in Norway, Sweden and Denmark. The book will not catalogue and describe the work of these men so much as it will show how their work illustrated tendencies in modern life and literature.

* * *

In celebration of the twentieth anniversary year of McClure's magazine there will begin in the October issue of that journal, the autobiography of the editor and founder, Mr. S. S. McClure. This promises to be a most interesting and instructive series, and as a narrative, will without doubt hold a high place in the history of American business and American life.

With the September issue of "Harper's Weekly," a new figure—Norman Hapgood, nationally known as the editor of Collier's Weekly—assumes its editorship. Mr. Hapgood is a product of the Middle West, says McClure's in a recent appreciation, "from which Washington and New York have drawn so largely for the men who have taken charge of great affairs." As a boy, he lived in Chicago and Alton, Ill. As a young man, he was graduated from the Harvard Law School, practiced law in Chicago for a year, and then took up the more congenial and exciting work of journalism, starting as a reporter on the Chicago Evening Post, at a salary of five dollars per week.

From the Post Mr. Hapgood went to Milwaukee as a political writer and dramatic critic; then to the New York Evening Post, and, after two years, went from the Post to the New York Commercial Advertiser, where he wrote editorials and successfully built up departments on schools, literature and the drama, finally concentrating his attention upon dramatic criticism.

In 1902 he became editor of Collier's Weekly, during his ten years' service on this paper he became known to the whole country.

Harper's are to be congratulated on having secured the services of so strong a personality, and so great an editor—perhaps no greater has filled that important post since the days of George William Curtis.

* * *

The Houghton-Mifflin Co. will be the American publishers of the memoirs of Li Hung Chang, edited by W. F. Mannix. J. W. Foster will write the preface.

* * *

A biographical character sketch of Ellen Key, the celebrated Swedish writer on social and economic questions, particularly the feminist question, has appeared in English translation from the Swedish. It is entitled "Ellen Key: Her Life and Work," and is by Louise Nystrom-Hamilton, and the English translation is by A. E. B. Fries. It is written from intimate knowledge, by the wife of the founder of the People's Hospital in Stockholm, where, for more than twenty years, Ellen Key taught and lectured. There is an appreciative introduction by Havelock Ellis, and a frontispiece and other portraits. (Ellen Key: Her Life and Her Work. Putnam Publ.)

Elementary School Standards

Applied to New York City Schools.

By FRANK M. McMURRY.

World Book Company, Yonkers-on-Hudson, New York.

Pp. 218, \$1.50.

Dr. McMurry's task in the New York school investigation was to arrive at an estimate of (1) *the quality of instruction*; (2) *the course of study*, and (3) *the supervision by principals*. The investigation was not undertaken solely with the idea of discovering present conditions, but with the additional purpose of pointing out ways in which, if changes were needed, improvements might best be effected.

Rejecting the usual examinations as too superficial and narrow a test of knowledge, and as inadequate for testing the higher results of teaching, Dr. McMurry formulated standards in terms of life purposes by which to judge how good or poor the instruction now is, and at the same time suggest directions that improvement might take.

The standards used in this investigation then were selected according to the main elements in daily living, which are essential to the welfare of every person, and because of their universality are particularly worthy of acceptance as aims of school instruction. These were grouped under four heads: (1) *Motive on the part of the pupils*, i.e., one of the primary responsibilities of instruction, should be to inculcate objects in life, or purpose, on pupils. (2) *Consideration of values by pupils*. The topics in the curriculum must be near enough to things that are of vital interest to the pupil for him to feel their worth, and the instruction must be such that the pupils will be able to select in accordance with their individual needs. (3) *Attention to organization by pupils*. The importance of orderliness of thought in later life is so generally recognized that few people hesitate to place upon the school, from the kindergarten on, the responsibility for careful training of children in this respect. (4) *Initiative by pupils*. In the world at large

possibly the most highly valued quality of character is self-reliance, i.e., the ability to act as a leader whether in one's own affairs or in the affairs of others. The teacher can accustom pupils from the kindergarten on to share the responsibility of determining the work to be undertaken, of asking questions, of accepting or modifying answers. The procedure that she adopts with regard to it will be one of the best single tests of the worth of her instruction.

The proofs of the significance of the value of these standards is to be found in relation to habits inculcated in pupils; the independent use of knowledge and the control over knowledge by pupils; their value as tests of such subjects as spelling and the three R's; their value as sources of suggestion for improvement, in that they do not primarily test what children know, although this is included, they do two things: they fix attention (a) *on what the children are doing*, and (b) on the value of it as judged by *its relation to the purposes of instruction*, and finally their value in relation to the curriculum.

Dr. McMurry has classified instruction as (1) Instruction on the higher plane, and (2) Instruction on the lower plane. The former makes efficiency on the part of the pupils the goal. The striking fact here is the evident relation between instruction and the principal aims of the school. The latter makes retention of isolated facts and mechanical skill the acknowledged goal. It is here that the dividing line between good and poor teaching lies, and it was with reference to these two types of instruction that Dr. McMurry endeavored to find out to which of these two types the teaching in the New York City kindergartens and elementary schools mainly belongs. Further than this, the *activities of the children* should be the primary object of consideration, rather than the teacher, and the quality of the instruction should be judged mainly in terms of their activities.

The results of the application of these standards to the following particular recitations: Newspaper Recitation in Grade 6, Literature Recitation in Grade 5, A First Grade Recitation in Reading, Construction in a Kindergarten, Construction in Another Kindergarten, A Lesson in Shop Work, Grade, 7 B, 28 boys; A Lesson in Drawing, Grade 8 A, 37 boys; Arithmetic Lesson in Grade 1 A, Arithmetic Lesson in Grade 8 B, 40 girls; A Series of Lessons in Music, Physical Training and Hygiene, show that but two lessons

observed, namely, the first grade reading lesson, and one of the construction lessons in the kindergarten, belonged to the higher type of instruction.

In order to judge the reliability of the conclusions reached by direct observation, and to get a just estimate of the quality of instruction throughout Greater New York, it was realized that the quantity of data secured in this way would necessarily form an insufficient basis for conclusions in regard to the work of 15,000 teachers. Means for doing this were not difficult to discover, as the original ability of the teacher is only one of the things that determine the quality of class-room instruction. Other important factors are the abilities of her superior officers, the curriculum, the syllabi, and finally the supervision by principals and superintendents. These influences taken together must very greatly affect the atmosphere that surrounds the teacher.

The general application of these standards to the instruction in the kindergarten from point of view of motive on part of the children, attention to organization, attention to relative values, provision for initiative and independence, as a whole, meets the test of the four standards set up in a satisfactory manner; and that therefore the instruction there rests on the higher plane, i.e., it is good at present and promising for the future.

The general application of these standards to the instruction in the elementary schools from point of view of the effect of instruction on children's purposes, the effect of instruction on children's organization of ideas, the effect of instruction on children's weighing of values, the effect of instruction on children's initiative and self-reliance in general, show that not one of the standards proposed for judging instruction is satisfactorily met. What is more, the working theory of the New York City Elementary Schools shows attention to be systematically directed *away* from these standards. Briefly, it is this: (a) On account of the size of the system, uniformity is necessary in teaching, in rating teachers, in handling pupils, and in the curriculum.

(b) The principal subject-matter of instruction is what is automatically usable.

(c) The leading element in scholarship is accuracy in details.

(d) The time for the pupil to use his knowledge acquired in school is the distant future—not now.

The conclusion so far then is, that in general the instruction in the elementary school is poor. That the working aims of the schools themselves are low, and that there are not even signs of striving for the higher aims of instruction.

The application of these standards to the curriculum of the kindergarten, based on the observations of what was seen in the various kindergartens, as there is at present no definition and uniform curriculum, show, as a rule, that it is plainly determined by reference to the chief aims of the school, as expressed in the four standards proposed, that it greatly aids the kind of class-room instruction that can meet those standards.

The application of these standards to the following subjects of the elementary school curriculum: reading and literature, composition and grammar, spelling, music, nature-study and elementary science, arithmetic, drawing, construction work, cooking and sewing, geography, physical training and hygiene, show that only in reading and literature, in cooking, and in spelling, the curriculum partially provides to meet those standards. Judged by these standards the elementary school curriculum and syllabi are quite unsatisfactory.

Conclusions as to the quality of curriculum and syllabi of the kindergarten and elementary school are pointed out as follows: The curriculum followed, as seen on visits to various kindergartens, indicates that with partial exceptions the plan of study for that age of children is in substantial harmony with the standards set up. As to the elementary school the conclusions based principally on the printed statements in the curriculum and syllabi point to the following: (1) in regard to the extent that the curriculum provides real live problems, in order that instruction may affect the hopes and purposes of pupils, the curriculum under discussion meets this requirement to a large degree in literature, and the course in cooking, also, largely meets this responsibility. Outside of these two subjects the requirement is met in only a slight degree. The subjects of music, composition, sewing, drawing, shop work, physical education and arithmetic place the emphasis plainly on technical efficiency. There is no attempt, for example, to organize the subject-matter of geography about human problems. Nature-study and elementary science both are approached from an encyclopedic and scientific point of view entirely. The grammar likewise shows the scientific

standpoint only. The term scientific as here used (pp. 156, 158) seems to be interpreted as synonymous with technical, with abstract and logical, and for that reason is confusing. The scientific approach to a subject according to modern educational theory, means that it is based on fundamental principles, and by no means ignores relationship to life purposes. The viewpoint of nature-study is no different than the viewpoint of science, and it is only in so far as science is distinguished sharply from pure science that there is a difference. For example, in so far as nature-study is concerned it is the scientific attitude of children that we want to keep alive, and which is the most fundamental principle upon which a curriculum in this subject should be organized; this however, does not at all oppose the statement (p. 107) that the motive of nature-study should be relation of natural things to human life. (2) In regard to attention to relative values, the curriculum is in the main superficial and static. Many topics that have little worth are included, and many others that are a very source of life are omitted. (3) In regard to attention to organization, the curriculum indicates that the correlation of studies was entirely overlooked by the authors of the curriculum. Organization so as to secure a careful grouping of facts, so that the broader and to the children more significant truths stand out clearly as the unifying ideas—that organization is largely wanting. (4) In regard to expression of individuality of teachers and pupils, the curriculum and syllabi make little reference to any need of adapting subject-matter to pupils; and there is almost no reference to the importance of teaching children how to study alone, or to the best ways of doing it. As to the teachers, the syllabus attempts directly to reduce the method in each study to a formula leaving no room for the teacher to adapt her method to individual conditions.

So far as the effect of curriculum and syllabi on instruction in the elementary school are concerned, they not only fail to inspire good teachers or to encourage them by showing the relation of the aims and principles of educations to subject-matter and method, but they directly limit them to low ideals.

Standards for judging efficiency of a principal's supervision depend upon the functions of the principal. These are stated as follows: (1) To contribute to the enthusiasm of the teacher, and to this insight. (2) To aid the teacher in the organization of sub-

ject-matter and method. (3) To instil in the teacher the conviction that he is ever on the lookout in regard to the skill that she and the children exercise in regard to the weighing of relative values of facts. (4) To surround the teacher with an atmosphere as will encourage her to think her own thoughts and to express them frankly, also to impress upon her that he is ever watchful of her provision for self-expression among her pupils. Briefly the worth of a principal is to be judged primarily by his skill as a leader. His general relation to his teachers is that of an adviser and a helper.

Application of this standard to the character of supervision 1, as learned by observation and by interviews with principals, indicate the prevalence of the following four practises: (1) that very few minutes are spent at any one time with any one teacher; (2) that as a rule no remarks are made to the teacher about the work observed; (3) that interviews with teachers in the principal's office seldom lasted more than three or four minutes; (4) that what remarks were made were few in number, they were introduced without much reference to organization, and they received no fundamental treatment. 2. As learned through reports from teachers, it was found that teachers are generally agreed that they have received no individual help from principals. Statements concerning conferences of teachers held by principals show that instruction occupies a very small place in them, that discussion in them is rare, and that they depress rather than stimulate the teacher. The details on which these conclusions have been based have been verified by a study of several factors that necessarily greatly influence the extent and quality of supervision by principals. These are: (1) the overemphasis of administrative duties; (2) the great size of many of the schools; (3) the want of authority among principals; (4) the prominence of examinations of teachers, together with the poor basis on which they are conducted, and (5) the lack of theory as to method of supervising.

The recommendations proposed in regard to 1. Standards and Instruction are on the following topics: a. On unification of kindergarten and primary school. b. On limiting uniformity. c. On the status of the teacher. d. On discipline of unruly children. e. On the aims of the elementary school. 2. Courses of study. a. As to minor changes, such as omitting technical grammar, reorganizing the courses in nature-study, English History, arithmetic, estab-

lishing a fuller correlation of studies, enriching the course of study for the seventh grade. b. Adjustment of the curriculum to individual schools. c. Character of the syllabi. 3. Supervision. a. On the classification of principals' duties. b. On size of schools. c. On extent of authority to be granted to principals. a. On frequency and basis of tests of teachers. e. On development of a theory of supervision by principals.

The standards as formulated by Dr. McMurry, and the detailed description of them to actual school work, will be useful to teachers, supervisors and school officers anywhere. This book, therefore, is a decided contribution to the resources of elementary education.

LAURA EMILY MAU.

What Prominent People are Saying About Religion in the Public Schools

Concerning our discussion of the question of religion in the curriculum of the public schools throughout the ten numbers of Vol. XXIV, a venerable and sagacious educator has offered this opinion: "your position is clearly correct, but you need not expect to accomplish anything."

Undoubtedly there are considerable numbers who would agree to the general correctness of the views expressed while sharing in the doubt as to the effectiveness of the discussion. If the issues involved in any undertaking are of sufficient importance a campaign of "hammering away" is not only justifiable, but highly creditable to the hammerers. With this thought in mind it is our purpose from time to time to make room on our pages for such deliverances from men in public life as may serve to reflect the trend of thought on this vital subject hoping that something may be said by somebody that will eventually give the right trend to action.

The following excerpt is from "Ideals and Democracy, An Essay in Modernism," by Arthur Henry Chamberlain, just published by Rand McNally & Company, a stimulating book dealing with fundamental principles:

RELIGIOUS INSTRUCTION IN SCHOOLS.

"Not many months since an eminent divine in one of the largest and most influential churches in the country, speaking before a normal-school graduating class, strongly opposed religious instruction in the schools. He deplored the fact that too often teachers make it their business, by indirection or otherwise, to seek to inculcate their own religious beliefs and opinions. He insisted that the home and the church should devote themselves to religious instruction, leaving the school free to confine itself to the intellectual side merely. To the public school come "the children of agnostics and Christians, Mohammedans and Hebrews," each with the understanding that neither directly nor indirectly shall the employee of the

state do that which he has stipulated he will not do. "The state," says the reverend gentleman, "is a purely technical institution, and should refuse to accept the task of the religious and moral training of the youth, for which duty it ought to appreciate its own incompetency." He closed by saying, "Upon you, O American father and mother, rests the duty of training your children in the principles of the faith you profess."

Surely no one could undertake to combat successfully the sanity of this final statement. The public school, if it be true to its mission, may not devote itself to sectarian teaching and the inculcating of particular religious tenets. Those parents who desire the education of their children to be colored by doctrinal teachings will certainly place their boys and girls in parochial or church schools or denominational institutions of learning. They will not expect the public school to compel the avowed Hebrew child to sit under an exposition of Methodism, the Catholic to accept even passively the Mohammedan doctrine, or the agnostic to be steeped in Universalism. Particular secular or religious beliefs should have no place either directly or indirectly in the course of instruction in the public schools.

But even though we agree with this high authority on the teaching of religion in the public schools, should the state take no account of the moral training of the youth? Is it the business only of the church and the home to carry forward this moral training, and have the public schools no responsibility here? If the bishop is thinking of religious training in terms of sectarianism or creed, then we should agree with him that such teaching has no place in the public schools. The schools exist not for theological but for the most complete educational ends. So far as character building is concerned, that is a different matter. We shall venture the assertion that the principal excuse the public school has for existing today is that it may be a center of moral instruction.

KNOWLEDGE MUST BE BASED ON AN ETHICAL FOUNDATION.

Our educational fathers were sound in their doctrine that "Religion, morality, and knowledge being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged" (Ordinance of 1787, organizing the Northwest Territory). I understand that the use of the word

"religion" here is not intended to be taken in any narrow sense, as indicating an "ism." Knowledge is necessary, but it too may be secured at home, or at church, or out of school, in whatever capacity the individual may be placed. Knowledge without a strong moral directivity, without an ethical foundation acting as a dynamic, is often more to be avoided than desired, and he who has the former without the latter may become the most dangerous sort of criminal.

The school, you say, for intellection and the home and the church for morality. To place upon the church and the home the duty of inculcating the principles of moral living, and to intrust the duty of such proper instruction to ministers and fathers and mothers is not enough. Time was when moral teaching took place largely in the home. The home life was a community life. The home was the center of the family. There were fewer congested cities than now. Social and industrial conditions were vastly more simple than they are to-day. Children are now reared in apartment houses and tenements, and in stifling cellars and garrets. The manifold duties of fathers and mothers separate them constantly from their children, and the latter simply are allowed to "grow" as was Topsy. The increased desire for wealth and the get-rich-quick spirit of the day render parents careless of their duties in the realm of moral instruction. The very atmosphere of this century of faster living makes the problem ever increasingly complicated."

Mr. R. Fulton Cutting, President of the New York Association for Improving the Condition of the Poor, in a recent address spoke as follows:

"Organized co-operation between the church and public school teachers will materially increase the influence and importance of each in the community in forming a moral sense in the plastic minds of the community's youth. Everywhere, through school committees, the pastor and his people should get in close touch with teachers, principals, and district superintendents of the public schools, to study modern methods of education, sanitation in the schools, the adaptation of the curriculum to meet the needs of the community, and work for the introduction of manual training, elementary agriculture, and domestic science. At present machine methods of education with no regard for individual capacities or defects of children are responsible for much of the crime in the country.

"There are 19,000,000 children in the public school of this country, receiving no direct religious education. For five hours a day they are in touch with their teachers and under the teachers' influence. Once a week, less than 1 per cent. of these children go to Sunday Schools, which attempt to make up for the lack of moral education in the public schools; but too often the methods of pedagogy used in these Sunday schools are archaic and obsolete, the practical methods of teaching in the public schools being there unknown. The church exhausts itself in efforts to reclaim the youth whom it has neglected."

Addressing the session of the Federated Catholic Societies at Milwaukee August 11th, Archbishop Ireland declared that "the evil to-day in America is the decay of religion, and, in necessary sequence, the decay of morals. In both instances the cause of the decay is the enforced secularism of the State schools. Others than Catholics, heedful observers and intelligent thinkers, admit the evil, admit the cause and give the alarm."

Speaking further of secular schools the Archbishop said: "Not against State schools as such do I raise objections, but as to the method in which they work—methods that, whatever the theory be, do in fact consecrate secularism as the religion of America and daily are thither driving America with the floodtide of Niagara.

"Somehow, I claim, secular knowledge must be imparted to the child so as not to imperil its faith in God and in Christ. Prove to me, I say, that this contention does not fully fit into the Constitution of the United States; that in making it I have not in mind the welfare, the salvation of America—prove this before you call the contention un-American if not anti-American."

This eloquent pronouncement is worthy the consideration and endorsement of Protestants as well as of Catholics. With such breadth of view and with such ardent patriotism as here expressed the Archbishop, we conclude, would not consider the parochial school, valuable as it may be to his own communion, the solution of the problem he presents. Only the spiritualizing of the secular school can meet the contingency, and for this purpose good Americans can afford to distinguish between what is essentially sectarian and what is fundamentally religious.

Lessons in Pedagogy

By CHARLES H. DAVIS, B. S.

NOTE.—The following lessons in History and Principles of Education, Methods of Teaching and School Management will be found helpful to those teachers who are fitting themselves for higher licenses or for those who desire to complete the Normal Reading Course being conducted by the Editors of EDUCATIONAL FOUNDATIONS.

THE MEANING OF EDUCATION.

I. Definitions:

- (a) Education is the generation of power.—Pestalozzi.
- (b) The purpose of education is to give to the body and to the soul all the beauty and all the perfection of which they are capable.—Plato.
- (c) Education, in its broadest sense seems to be a full, perfect discipline not only of the mental and moral powers, but of the physical as well.—Raab.
- (d) The aim of education is to render the individual, as much as possible, an instrument of happiness to himself, and, next, to other beings.—James Mill.
- (e) Right education is such a preparation of the individual, in physical, intellectual and moral capacities, as will enable him to secure the highest enjoyment from their use, here and hereafter.—Roark.
- (f) Education seeks, by social stimulus, guidance, and control, to develop the natural powers of the child, so as to render him able and disposed to lead a hearty, happy and morally worthy life.—Sully.
- (g) How to make the most of one's self, is not this the purpose and problem of education? Education in its broadest sense means development. It is the evolution of every human power.—Baldwin.
- (h) The object of the common school system is to give to every child a free, straight, solid pathway by which he can walk directly up from the ignorance of an infant to a knowledge of the primary

duties of man, and can acquire a power and an invincible will to discharge them.—Horace Mann.

(i) All education proceeds by the participation of the individual, in the social consciousness of the race. The school is a form of community life in which the child shares the inherited resources for social ends. Education is, therefore, a process of living and not a preparation for future living.—John Dewey.

(j) Complete living is the end of education. We must not simply *think*, but *know* what information will be useful in after life. The activities, which constitute human life, may be classified in the order of their importance: (1) Direct self-preservation; (2) indirect self-preservation; (3) the rearing of children; (4) social demands and citizenship; (5) miscellaneous activities filling the leisure part of life.—Herbert Spencer.

(k) If education cannot be identified with mere instruction, what is it? What does the term mean? I answer, it must mean *a gradual adjustment to the spiritual possessions of the race*. Those possessions are at least five-fold. The child is entitled to his scientific inheritance, to his literary inheritance, to his aesthetic inheritance, to his institutional inheritance and to his religious inheritance.—Nicholas Murray Butler.

(l) The aim of education is the formation of a moral-religious character. Stimulate and develop in pupils a many-sided interest in worthy objects. The educator must aim (1) to cultivate will; (2) to make this will powerful and firm; (3) to direct the will to the good. The completion of the character requires the child to realize himself by constantly exercising control over himself through self-formed resolutions.—Herbart.

II. Directions:

Study these definitions until you can state clearly and adequately in your own words what each author means. Then fit yourself to criticise every definition favorably or adversely, or both favorably and adversely; and lastly, memorize your choice of these definitions, or formulate a satisfactory definition of education for yourself. Memorize definitions marked (j) and (k).

III. Principles of Education:

The four principles given here are generally accepted as the fundamental principles, although many others are given by some educators. Learn these and apply them:

1. *The mind must gain through the senses its knowledge of everything external to itself.*

This means that "sense percepts are the elements of all knowledge"; "that new subjects should be presented objectively"; that "things should come before words." Use all the senses whenever you can. Use object teaching to train all the senses through *use*; and also utilize objective methods, maps, charts, drawings, pictures, etc. Such illustrative methods are called *graphic methods*. Note that this kind of objective teaching is not effectual in giving a correct representation of the real objects until pupils have acquired considerable power in the use of the constructive imagination; for until this power is acquired, models, pictures and drawings are to the pupils just what they appear to be to their senses, instead of representations of the true nature of the objects on which instruction is attempted to be given.

2. *There is a natural order in which the powers of the mind should be exercised, and the corresponding kinds of knowledge taught.*

The order is perception, memory, imagination, conception, judgment, reasoning. In following out this order, the period of school life is often divided into three stages of development, sometimes called "culture epochs."

This second principle has been specialized into maxims or axioms, which apply to elementary teaching, but they are not universal principles of teaching.

Read, think and discuss these:

- (a) Observation before reasoning.
- (b) From the simple to the complex.
- (c) From the particular to the general.
- (d) The concrete before abstract.
- (e) Sense knowledge before thought knowledge.
- (f) From the known to the related unknown.
- (g) Processes before rules.
- (h) Facts before definitions or principles.

3. *The mind can exercise only a definite amount of energy at any one time. This amount varies with age, natural ability, and degree of development.*

In other words, "teaching, both in matter and method, must be adapted to the capability of the taught." The intellectual powers are

all active, though not equally so, at six years of age and as the child advances in grades, all teaching should be adapted to the variation in the relative activity of these several intellectual powers. Teach one thing at a time; and in all explanations present one step at a time, holding each step until the preceding one is thoroughly understood. This is what DeGarmo calls the *law of Successive Clearness*. In accordance with this principle, all illustrations should be simple and familiar.

4. *Self-activity of the pupil under proper guidance.*

This principle should not be misunderstood. It does not mean that pupils should be encouraged or permitted to enjoy unrestrained activity. It means mental, moral and physical activity under the direction of the teacher. Such direction leads to proper habituation.

Under this view of the teacher's duty, consider the following topics:

(a) "Learn to do by doing." (Advocated by Comenius and Froebel.)

(b) "Self-activity is the source of knowledge."

(c) "Never tell a child what he can find out for himself." Show that this dictum cannot be taken literally. Children must have some direction in overcoming some difficulties in their work.

(d) "The crudest form of self-activity is self-assertion; its process is self-expression; its end is self-realization." What does this mean? How would self-realization satisfy Dewey's social view of education and Butler's spiritual adaptation?

These views and maxims may seem self-evident, but their realization is a difficult matter. Here applies the distinction between teaching and telling by the teacher; here arises the real test of one's fitness to teach. In your study of this principle, it is advisable for you to recall all the devices and methods you have used in overcoming the difficulties in teaching; for your difficulties have decreased in proportion as you have satisfied the conditions of this principle.

Have you aroused your pupils' self-activity by teaching them what knowledge is desirable, where they can find it, and how they can master it.

(The next lesson, in the October number, will deal with History and principles of Education.)

Educational Foundations

VOL. XXV.

OCTOBER, 1913

No. 2

Better School Teaching

(Concluding Article)

WILLIAM ESTABROOK CHANCELLOR

Training the Eyes to See.

Above all, the teacher who desires better spelling will train the eyes to see. Write a word on the blackboard and erase at once. Let the children spell it on paper. Write ten words, erasing one after another for the children to recall and reproduce them. Use figures sometimes. Train them to observe the number of objects and their nature,—as the number of panes of glass in a window; the kinds of trees in a yard; the colors of their comrades' eyes.

Make upon the blackboard such combinations as these, viz.

Take such words as these and ask the children to make as many other words as they can out of them (a) using every letter, (b) using only as many letters as they need, viz.—

1. Ward, draw. 2. Post, stop, pots, tops. 3. Item, time, mite, emit. 4. Think, ink, in, kin, hit, thin, tin, kit. 5. Steam, team, mate, meat, seam, stem, met, me, tea, ate, eat, tame, mesa, same, seat, sat, set, east, am, sea, mast.

Or show them how changing one letter will change the word as e. g.—

Batter, better, bitter, butter.

Batter, fatter, hatter, latter, matter, patter, tatter.

Better, fetter, letter, setter, tetter, wetter.

Fatter, falter, faster.

The Teaching of English.

Numberless exercises can be invented, many of them by the children themselves.

English means as a school subject many things,—reading, as above; writing; spelling; language; grammar, composition, rhetoric, literature, declamation, recitation in class, oratory, debate, history of literature, biography of authors.

Narrowly defined, English means language, composition, grammar, and rhetoric,—the first three in the elementary grades, the last three in the secondary grades.

To write and to speak English accurately and well, one must know good English prose. Not every teacher knows good English prose when he sees it. Among the best recent writers of English prose have been Matthew Arnold, John Ruskin, Henry Ward Beecher, James Russell Lowell and George Eliot. One who really cares to have his children speak and write English well will first require them to memorize verbatim many passages of good prose.

For this purpose, poetry does not serve. The order of the sentence structure is too involved; the rhymes interfere; the meter tends to sing song on the part of the children; and many of the words are poetic and not natural in prose.

Beautiful as are many parts of the Bible considered simply as English literature, not many passages are suitable for this purpose. Besides this, some parents are likely to object to such use of the Bible because the book is sacred to them; and others object because they are not religious. E.g. The Twenty-third Psalm conveys a beautiful message; but its opening sentences are "The Lord is my Shepherd. I shall not want. He maketh me to walk in green pastures," etc. All these sentences are short. In truth, this is poetry, not prose.

The passages selected by the teacher for memorizing should be in good variety,—some narrative, some descriptive, some expository, some argumentative, some conversational. They should always be interesting in theme.

The difference between such passages to be learned memoriter and memory gems is that the latter are short and of an ethical value. The passages taught in order to create in the mind of the child the habit of clear, simple, attractive language expression should seldom be short and by no means always ethical.

A boy who talks school-boy patter, neighbor-slang, and in exclamations, not sentences,—in defiance of grammar and of good

taste, can be cured, if at all, only upon the theory that one nail drives out another; he must be so saturated in good English for years and years that unconsciously he will escape out of vulgarities and confined expressions into the large freedom of pure English. This often takes a long, long time. Often it involves changing not only the habits of the tongue, but the very character of the mind.

Second, upon long and successful trial, I recommend beginning all written composition with oral conversations, discussions, even debates at time. Seldom does one write freely who does not first talk freely. Often, men are good talkers and poor writers, seldom vice versa.

Here are a few of the more than two hundred themes that I have tried. Let the class talk perhaps a week before writing anything.

1. Is a physician more useful than a fireman?
2. Is it better to be a shop-girl than a store-clerk?
3. This school needs a gymnasium more than an assembly hall.
4. Does it pay to keep poultry.
5. What is the best way for a boy to make money?
6. How I help my mother at home.
7. If I had my choice, I would rather visit Paris than Pekin (or South Africa than Australia, or Mexico City than Montreal, etc.).
8. The very best thing that I can think of to do with \$10 (or \$100.) if I had it would be to (here follow the various plans of the children. One would buy shoes for each of his brothers and sisters. Another wished to buy and raise a Jersey calf for the family cow).

Children, like adults, refuse to write when they have no ideas. They get ideas as we adults do by thinking, by talking with one another, by reading books, and by taking time.

Oral reproduction of reading lessons, geography and history is helpful.

Story-telling for the Sake of Good English Conversation by the Pupils.

Good story-telling by the teacher is even more helpful. The

way for the teacher to learn to be a good story-teller is to practice telling short stories to the children,—begin with one story, tell it several times; take another, tell this several times, alternating with the first.

From Esop's fable of the House Dog and the Wolf to the Legends of King Arthur, the teacher has thousands of stories from which to choose. A dozen a year soon means half a hundred; and half a hundred stories are more than any teacher should try to tell in any one year even in a large ungraded rural school with a great variety of children.

Grammar.

As for the parts of speech, the kinds of sentences, the rules of grammar, the rules of punctuation, and later the figures of speech, the principles of diction, the varieties of literature,—all considered technically,—we are all of us apt to “get the cart before the horse” and teach them a priori, metaphysically, abstractly, logically, philosophically, scientifically, or some other way that hinders our boys and girls.

Teach, first, by example; next, establish habits of right expression, and freedom of expression with these habits. Gradually and incidentally introduce grammar and rhetoric.

The Correction of Papers.

Always comes the question, from the higher elementary grades and the high school,—“Is it necessary to correct all the written papers?”

Never throw away any written papers before the eyes of the pupils. Seldom throw any away until several days have expired. Always keep some papers by means of which to show each pupil whether or not he is improving.

But it is wasteful of the teacher's time and energy and often exasperating to the pupils to have every paper minutely marked for errors. Mark some exercises, not all. Let us remember that with many children, a red or blue mark on a paper is a stumbling-block on the road of the next effort. The boy or girl who upon seeing the new sentence just written thinks, “Well, I suppose the teacher will find a mistake in it,” is not on the path to good writing. No author, however skillful and famous, would produce

books, however good, if he were in constant fear of editorial blue penciling upon his manuscripts. Yet any author is glad to have occasional suggestions. He likes to think that others observe his work carefully. Children likewise.

Apportionment of Time in English Teaching.

It is evidence of good teaching when one finds a school in which there are frequent conversations, oral stories and reproductions, and compositions as above with grammar and language incidental lessons. "But in what proportion?" may be asked. This depends upon conditions. Higher grade elementary school children need to spend nearly or quite three-quarters of an hour daily upon English; this amount of time is possible in rural schools; but the work must be mainly without constant teacher direction. On this basis, compositions can be written every fortnight; and paragraphs daily.

Geography and History.

To many teachers, the history and geography lessons are most dreaded; but by as many more, they are most enjoyed. There are two ways by which to pass from the first word to the second. They may be travelled at one and the same time or independently. Either will bring the teacher to the desired destination. They are in principle the same for geography as for history, but the devices are not quite the same in the case of the second way.

The first road by which the teacher may come to enjoy teaching geography and history is to learn these two subjects oneself. Knowledge begets interest infallibly; it is a law of mind, a natural law.

One reason why American teachers often know but little of history and geography is that we suppose that these subjects are contained in the school text-books. Of real history, but little can properly be put into school books for children. This is a very different world from that which we teach our boys and girls because we wish them to make a better world. Geography is not in text books at all or in any other books, but outside in the natural world.

One who wishes to know history well enough to enjoy it must lay aside the epitomes and compendiums and read special

works, such as Prescott's "Ferdinand and Isabella," the volume on "Napoleon" in the Cambridge Modern History, or the biographies in the American Statesmen Series. Read thoroughly in one epoch or master the life of one man. We should not read in order to tell what we read to our boys and girls but mainly that we ourselves may understand. The man or woman, however, who knows Trevelyan's "American Revolution" cannot fail to be interested in teaching boys and girls the true inner story.

Similarly, study the geography of one's own section in government publications. Walk or drive around in it. The best geography is a railroad ticket, especially one that takes the passenger upon a slow accommodation train, stopping at every station. Voyage down the Ohio or the Mississippi in a packet boat that stops every few miles at landings often remote even from country farmhouses. Or go far afield and master the geography of Chile by reading every book and magazine about Chile that can be found.

The other way to get from the mood of dislike of history and geography is to let the pupils do about all the work in these subjects while the teacher acts as director. In one town as superintendent, I accomplished this. The method in geography is simple; for history, it is harder.

The Collection of Materials by the Pupils.

Let the children collect from old magazines and books and newspapers, from railroad and steamship folders, circulars and pamphlets, from real estate pictures and well-written descriptions they can find; and let every boy and girl make each year his own geography.

The actual record for one seventh grade room in one school containing mostly foreign children and poor was this in one year, viz.—

1. Forty-two card sheets 30"x36" covered upon both sides with pictures for every country of importance in the world—Canada, India, Siam, Brazil, Scotland, etc., etc.
2. A picture book collection ranging from 250 pictures (the least) to 800 (the largest).
3. An average of 16 booklets upon geography written and illustrated by each pupil.

4. A geography note book of about 100 written pages made by each child.

They wrote of imaginary travels in Holland, in Russia, in the South Seas, in the United States. They sometimes wrote of all the countries in which one product, such as silk or gold, is found. In other cases, they compared the costumes of the peoples of various lands.

They did the work. Incidentally, they practiced booklet cover designing and making, spelling, handwriting, drawing and map-drawing, and English composition. The time assigned was a half-hour each day. Of course they had to ask friends for picture postal cards; and they spent some money. They were, however, too poor to spend much. Many of their suggestions came from advertisements in periodicals.

Work of this kind grows in interest; but it has no limit other than the desire not to draw unduly upon the time of other subjects.

To get material for history is harder. And yet in some ways this is even more interesting. One child drew herself a fine six-inch high portrait of each President and put it in her own history.

In teaching geography, one should be constant in teaching (a) distance in the terms of walking and modern traveling conveyance; (b) orientation; (c) relative directions and sizes and numbers; (d) relative heights of land; (e) relative climates. Space is the subject of geography,—space and man's use of it.

In teaching geography, teach chronology backward in the terms of generations of men, the children's forefathers; discuss motives and causes; and emphasize epochs, movements and period according to their dominant characteristics and interests.

A teacher who will pursue these methods fairly for two years is unlikely ever to use any others afterwards. The school textbook becomes of secondary interest. It is used only for reviews and to make corrections of errors as a reference book.

The School Booklet as an Educational Device.

The method here set forth for the pupils definitely arouses and utilizes their self-activities. Also, it shows the parents that the children are interested and busy with their school work.

This booklet device is useful not only in history and in geography but in many other lines. It starts a good habit for high school and college courses.

The Correlation of Subjects.

For several decades, it has been an ambition of educators to get all the subjects of the elementary school into correlation. The chief means so far employed have been English composition and school-drawing.

We may have compositions written about any school subjects—the history topics, geography, in English itself, current events—and we may then consider the compositions from the points of view both of material and thought and of style and grammar.

In high school work, it is a fine exercise to require the pupils to write out full and clear accounts of scientific laboratory experiments, of outdoor natural history excursions, and of the various exercises in what is called by the general term “manual training” or “the domestic and industrial sciences and arts.”

The Teaching of Drawing and of Painting.

Drawing also is a key to correlation. We may have our school garden drawn to line and scale; our school grounds and buildings drawn both mechanically as for architectural purposes; or pictorially. Many topics as suggested above lend themselves to picture-making. The illustrations to essays may be either decorative or truly illustrative.

There is, however, but little time in many rural schools for drawing instruction. Occasionally, there is a teacher in a school where one or two drawing lessons may be given each week.

It is one of the historic crimes against humanity that its artists have not been encouraged by school teachers always and everywhere. Drawing was man's second means of thought-expression, coming only after articulate speech. All writing was originally ideographic,—the writing of ideas. Hieroglyphs preceded cuneiform, and cuneiform preceded our arbitrary and non-synebolic letters. Hieroglyphs are the highest form of ideography.

The school teacher who represses the pupil who desires to draw is ignorant of the significance of drawing to the human

race. Form and color are essential to the maintenance of modern civilization.

The teacher who is set upon better school teaching will try to give some opportunity to every child to paint and to draw who is willing to try. Fortunately, in most graded schools, in city and country, the course of study calls for drawing and color work; and often there is a special supervisor to help the teachers and the pupils. Many large cities have a corps of drawing teachers as well as corps of specialists in music, in physical culture, and in other subjects.

It is often difficult for the one-room rural school teacher not only to get time for such instruction, but materials. But the teacher who sees the need and the opportunity will usually solve both these problems.

Children should, when possible, learn to lay in wash-colors for landscapes, for backgrounds, for flat work before they are taught line-drawings. It is easier to paint in four colors a sailing ship upon a sunset sea than it is to draw in black and white so much as a book upon a desk. Of course, water-colors are "sloppy" and "messy." Pastels and colored crayons are easier in this respect to handle; but always they give less satisfactory artistic results. Black ink makes more trouble, but brush work in ink is much easier for the child than pen work and even pencil work.

Exhibit Some of the Work Constantly for Each Pupil.

It is a sign of good school to see hanging upon wires or stout cord upon the walls booklets and essays and single sheets decorated or illustrated by the pupils themselves. It is a sign of that larger life desired by all of us. Our purpose in life is to live. Life, abundant, is its own end. Making a living is only a means to that end. Many a man has failed to make a living for want of imagination to see chances and of accurate observation to see facts. In modern life, it is dangerous to undertake to say where art ends and utility begins.

Many a good newspaper cartoonist began with secret caricature drawing in some rural school. Many an art designer in modern textile enterprises, many an architect and engineer began similarly.

It is neither the modern barbarian nor the ancient savage

who objects to school-taught drawing; but some weak-minded person lifted by luck above his heaven-intended station; in other terms, the ignorant man or the nearly imbecile, the neuron.

Teach Hygiene, Some Physiology, and Very Little of Anatomy.

In every good school, some time is given daily to school, home and personal hygiene. Of this, most teachers even yet know but little; the increase of knowledge, however, is proceeding very rapidly.

Among the items requiring frequent instruction are these, viz.:

First, and most important, food and its cooking, and drink. None of us can pursue alternative courses; but the boy who eats meat three times a day, drinks strong coffee or tea likewise, and eats little or no cereals, vegetables, nuts and fruits will be a very different kind of boy in flesh and bones and nerves and brain from the boy who eats meat once a day, drinks milk, and eats some cereals, vegetables, nuts and fruits every day. The second boy will certainly be heavier, stronger, quicker and calmer.

Second, and next in importance, sleep. One must sleep in fresh air constantly renewed, summer and winter. When cold, wear more clothes: if need be, wear two thickness of garments at night in bed. Blankets of wool are desirable as part of the bed-clothing.

Third, bathing. Every person should bathe all over at least three times a week. Face, hands and back of neck need bathing at least three times a day.

Fourth, care of teeth and gums: brush three or four times a day. When gums bleed, brush oftener to make them hard.

Fifth, care of eyes and ears.

There are many other items.

For school-children, hygiene is more important than physiology; and physiology than anatomy.

For lessons in school and home sanitation and hygiene, such as clean, pure water, fresh air, dusting, scrubbing, and antisepsis with asepsis generally, the good school teacher will seize each opportunity as it comes.

A sure way to spread any epidemic through a rural or any other school is to require all the children to drink out of one

water-pail with one cup. Let each child have his own cup or glass. A bubbling fountain is better. Drinking from a pure stream of running water. Microbes, though small, are facts. The microbes of disease are more to be feared nowadays than wolves or panthers.

A very cynical and a very ignorant man once told me that there were no microbes; he had never seen any. To whom the answer was that he had never seen hate or revenge or malice either.

The Industrial and Domestic Arts.

Can the rural teacher give any instruction in carpentry or in sewing or in any other of the industrial and domestic arts? Agriculture, the most important and common of all such arts, is being introduced in some States into every school. Like history and geography, it is rather for the older children than for the younger. But in the forms of Nature-study and of school-gardening, children of any and all ages can and should share in agricultural lessons. And in topics and special exercises, the other domestic and industrial arts will come in also.

The school is to be made a microcosm of the world; it is to mirror all modes of life, to prepare for all kinds of social activities.

The Teaching of Arithmetic.

The measure of all these things is in arithmetic and the other elementary school mathematics. This little book has considered music and drawing, reading, English, spelling, history, geography, agriculture and hygiene; and now for the last of all the standard elementary subjects we reach arithmetic. Why should it be considered last and not first? Because it needs to be considered in the light of all these other interests. It is by no means least in importance.

Generally, we teach too much arithmetic, spend too much time upon it, worry about it too much, and in the end get poor results. Why? Because we begin it too soon and wear ourselves out with it.

Arithmetic has two aims—computation and problem-solution.

Computation consists of the fundamental operations of (a)

addition, (b) subtraction, (c) division, (d) multiplication, (e) ratio, (f) fractions, (g) percentage, (h) measurement, (i) finding roots.

Problem-solutions involve discovering processes to get answers to (a) one-step problems, (b) two-step problems, (c) three-step problems, (d) four-step problems, (e) multi-step problems.

Computation tests understanding and habit.

Problems test ingenuity and computation-skill.

Now the question as to how many steps a child can take successfully in an arithmetic problem is largely a matter of brain-growth.

Problem: A had \$2,800 cash. He bought a house costing \$5,000 and agreed to pay his cash down and the balance at the rate of \$50 a month. In how many months should the house be paid for? This is a four-step problem, suitable for ordinary 11-year-old minds. Fourteen-year-old children should be able to solve it without writing. Very few 8-year-old children can solve it at all.

Better school-teaching means in respect to arithmetic, first, doing but little problem-work until fourth year in school; second, much oral or so-called "mental" arithmetic; third, short lessons under high pressure; fourth, some easy geometry to help with the denominate numbers; fifth, problems made from the daily lives of the children.

Should the multiplication tables be taught memoriter? In the fourth year of school, not earlier.

Should several methods of computing interest be taught? No, only the six per cent. method.

Remember that few children are ever to be bookkeepers, but all will be purchasers of goods.

Arithmetic deals with multitudes of magnitudes. It must be kept concrete. It measures space and spatial objects by units; and it prices the objects for financial value.

No good school teacher ever neglects arithmetic; but no good teacher ever teaches in it any topics of no value to anyone to know and does not dwell long upon topics of value only to a few.

Facility and Judgment Are Not Transferable From One Subject to Another.

It is sometimes argued that arithmetic is "a fine mental discipline." The old myth dies hard. Subjects of especial difficulty or of especial unpleasantness were supposed to be especially "fine mental disciplines" until it was learned, first, that the difficulty of a subject depends largely upon (a) the age and (b) the natural capacity and aptitude of the pupil and second, that the mastery of one subject is good just that far, good for that subject. As physiologists learned that the brain develops as it grows with age acquiring naturally greater powers; as psychologists learned that some minds are abler at ten years of age than other minds will ever be and that we have traits and powers that incline us toward some subjects and against others; and as we have all learned from common sense that experience and skill in one line are not transferable; the whole doctrine of mental discipline has gone overboard. All that remains of it are two facts,—first, oral knowledge helps us to appropriate other similar knowledge, and, second, the moral habit of persistence may carry from one time to another,—may, not surely does. Many a man is a sage in his own field, and a fool otherwise. No man, however wise, is wise in all matters. Experience is the price of wisdom, definite experience. The one serious trouble with humanity is that some of us in some fields cannot learn even from experience.

The Pedagogy of the Secondary School.

It is not within the province of this book to discuss the rapidly changing high school course, but only to bring out a few points of high-school pedagogy.

Ours is the day of more science, of more history and literature, of more mechanic and domestic arts in the high school. It is generally true that high school teachers think that pedagogy is of small importance. Only the materials and contents count; the methods are affairs of comparative indifference. It is also generally true that high school teachers do not teach as well as do primary teachers for exactly this reason,—that they do not and the primary teachers do care for pedagogics.

The high school has the selected natural and economic aristocrats of the population. It has few pupils of the lazy temperaments. It has no imbeciles, and but few of the weak-minded such as have been entered by mistake or have been crowded in by influence. It has but few children from poverty-straitened homes. And yet from certain causes, it is not easier to teach in a high school than in an elementary school or in an ordinary rural school.

One cause is that high school pupils are in a period of physical and intellectual and moral change and transition. Many of them are in capricious or obstinate moods; and they are harder to understand and to control than smaller children.

The Life-periods of the Individual.

Each man who lives out a complete life passes through certain stages that may be distinguished in this scale

Senility, lasting perhaps.....	1 to 10 years
Senescence, lasting perhaps.....	10 "
Maturity, lasting perhaps.....	25 to 40 "
Tertiary adolescence, lasting perhaps...	6 "
Secondary adolescence, lasting perhaps..	3 "
Primary adolescence, lasting perhaps....	2 "
Post-childhood, lasting perhaps.....	4 "
Childhood, lasting perhaps.....	6 "
Later infancy, lasting perhaps.....	2 "
Early infancy, lasting perhaps.....	2 "

Adolescence is a period of regeneration, when hitherto latent forces wake up; and the boy becomes a new or different person. The changes in the girl come early and are even greater.

Two kinds of Subjects Are in Any High School—The Immediately Useful and the Preparatory, So-called.

Another cause is that in most high schools, half or more of the studies taken by the pupils are without present significance to them. Latin and German composition and grammar, algebra and geometry make no immediate appeal to most boys and girls.

Another cause is that high school teachers usually must teach so many hours a day that with the hours outside of school in preparation and in the examination of papers they are con-

stantly in a state of fatigue.

How, then, may we have better high school teaching tomorrow? That is, without changing the courses, without reduction of time spent in teaching, and without knowing more of the "psychology of adolescence," which means more of boy and girl nature.

The answer depends with each individual teacher upon the subjects that he has to teach and upon the pupils actually in his classes. Nor is the answer essentially different from that which should be given to the teachers of the elementary graded school and of the rural one-room school.

We must make our subject seem more real and vital, more interesting and useful to our boys and girls. To do this, we must enter more closely and more largely into their lives. We must try to get them to care more, first, for their school and, second, for their school work. And we need, therefore, to get more of the work out of them and less of it out of ourselves.

There are so many distractions now for school children, especially for high school children. Few towns with a high school are without their motion-picture shows and poolrooms or worse. The question for those of us who teach in high school is whether or not we can bear up against these outside forces; and hold our boys and girls to real educational endeavor.

All Children Go to Elementary School; Not All Yet Go to High School.

The statistics show these facts, viz.:

Pupils in high school and academy.....	900,000
Number of high schools.....	9,000
Number of teachers in high schools.....	37,000
Number of teachers per high school.....	4
Number of pupils per high school.....	100
Number of pupils per teacher.....	25
Number of classes taught per day per teacher.....	6
Number of boys and girls from 14 to 18 years of age who might be in high school.....	8,000,000

As to this last item, we should remember that some of those not yet in high school are in grammar or district school but will arrive, and some are not morally and intellectually fit for high

school work. But we have doubled the attendance in ten years. Why? Because elementary and district schools have so greatly improved. High schools also have greatly improved.

Among the reasons why high schools do not improve faster are (1) that the colleges and scientific schools will not allow them to change the courses of study as many of us believe they should be changed; (2) that the public is not ready to spend more money fast enough to make the improvement that we all see is necessary in the salaries and numbers of teacher in each high school, and (3) that many high school teachers as yet do not see the meanings either of pedagogy or of the social relation between school and society.

When Feasible, School Consolidation is Desirable.

To the improvement of school-teaching, the consolidation of schools usually contributes greatly. It means graded classes, specialized teaching, larger social solidarity over a greater area, actual economy, both of construction and maintenance; opportunities for parents' organizations, evening lectures, evening school, a good school library, better supervision, and many other items. Yet, it is not always possible to achieve. To-day and to-morrow we must take conditions as we find them; perhaps by next year or later, we can make the conditions better.

Food for the Body; What of the Mind?

Finally, we who teach school spend so much money weekly, annually, for food, clothing and shelter for our bodies. How much do we spend weekly, annually, for ideas and sentiments that nourish the soul? Our minds need books as much as our bodies need meat.

Any life, whether in school or in bank or upon farm or sea, that keeps the mind in a routine is narrowing and painful to experience in oneself or to see in another. There is a larger life, not merely professional but genuinely human into which we can enter only by books and by travel. This is not a question of reading a few "reading circle books" each year. It is a question of reading many books and of going about upon holidays and in vacations to see this world in which we live and for which we are undertaking to prepare our boys and girls.

Read such books as these:

Henderson's "Education and the Larger Life."

McMurry's "How to Study."

Bagley's "Educative Process."

Butler's "Meaning of Education."

Drummond's "Ascent of Man."

Martin's "Human Body" (unabridged).

Wilder's "History of the Human Body."

Lloyd's "Wealth and Commonwealth."

George's "Progress and Poverty."

Bolton's "Principles of Education."

Hall's "Psychology of Adolescence."

Horne's "Philosophy of Education."

Ripley's "Races of Europe."

Tyler's "Growth and Education."

Smith's "All the Children of All the People."

Sumner's "Folkways."

Try to own a good encyclopedia.

Take two or three such magazines as *The Atlantic*, *The Literary Digest*, *The Outlook*, *Harper's Weekly*, *Collier's*, *The Century*, *Scribner's*.

Let Us Plan Long Lives.

Not all these aims can be achieved at once. But to many of us are given long lives. Usually, we have plenty of time to solve our problems. The young man or woman of twenty or twenty-five years scarcely expects, perhaps, to live to be forty years old; and the man of forty seldom plans for what he will be and do at sixty. And yet I have one good friend who has always been a teacher, and he is hearty and well at ninety-three years of age.

Let us take long views; with patience, through years, we may realize ever better school teaching until we become in fact good teachers.

INSTEAD OF A PREFACE.

Usually, authors write the preface last and put it first; sometimes, they write it and put it last, calling it an epilogue. This, however, is neither preface nor epilogue, but a running commentary condensed.

As I have written these pages, one or another of my teacher friends

and acquaintances has come before me; in all so many that I cannot dedicate this little book to any one person. At times, I have thought of two young teachers in the Maumee valley; one had twelve children in her school, her neighbor had sixty. For them, I have written some practical parts of this book. I have thought of another young teacher in southwestern Connecticut who likes to look at school-work in a large way; of a critic teacher in a State normal school in the Southern Missouri valley, who is interested in trying to measure human nature; of two women principals, one in New Jersey and the other in Oregon, who are always eager for suggestions to work out with their teachers; of all the teachers in a populous county in Ohio, after whose institute sessions, I was daily questioned as to details and more details; of a colored man in a southern county of Alabama, who with his own family lives in his schoolhouse and teaches his pupils practical gardening, carpentry and many other crafts; of a certain high school teacher in the metropolis of America, who began by teaching her subjects but has learned to teach her pupils. These and hundreds of others have been in my mind as I have written out these pages which contain nothing that I have not said in universities, normal schools and institutes more than once and much of which I have said many times.

Once, I visited a large town, which had good schools; ten years later, I visited the town again. The superintendent and teachers thought that the schools had greatly improved; but the townspeople were almost unanimously of the opinion that they had deteriorated, and volubly cited reasons. Both teachers and parents desired better schools; the former trusted, the latter mistrusted, organization, mechanism, card indexing, red tape.

Once in the same mail, I received three reports of school superintendents and boards each one of which naively admitted that their schools were "known to be the best in the country." I have visited the schools of thirty-eight of the largest fifty cities in the country; and schools in nearly every State, in all fully thirty-five hundred buildings. With many school "authorities" (whatever that means) I have talked often about "What are the best schools?" They must surely be the schools with the best teachers. I do not know where the schools are or who the teachers are; but I do know that discounting exceptions and averaging extremes, almost everywhere the general public forms a fairly just opinion about its own schools and teachers.

To-day, in every city and in every village and in every rural farm house, the American public is ready to accept better school-teaching. Man has awakened to the truth that he is educable and improvable by appropriate knowledge and training. Nearly every child among us wishes to make the most and the best of himself; and nearly every parent is anxious to submit his children to any reasonable process by which one of them may be made the best and the most of for livelihood and, better still, for life.

THE END.

Literature In The Rural School

By Jean Y. Ayer

Cortland Normal School, Cortland, New York.

The flippant heroine of a modern novel remarked, on one occasion, "If a girl is born to flirt, nothing can keep her from doing it; and if she isn't, no one can teach her how." I am inclined to parody this remark and to say that if a teacher really loves good literature, nothing can keep her from teaching it, and if she doesn't no one can teach her how. You can't light the flame of enthusiasm in another's breast, unless you have at least a spark of the divine fire in your own. You cannot teach, with honesty and enthusiasm, a liking for something for which you do not yourself care; and I am convinced that the teaching of required texts by a teacher who, at heart, dislikes or is bored by the literature she teaches, is responsible for the distaste for good reading that characterizes many bright, imaginative children, as well as many duller ones. Children, thus deprived of their birth-right, will in some cases become teachers themselves and go forth to spread the effects of their own poor training among their pupils. School superintendents as a rule fail to demand when engaging a teacher two most essential qualifications, that she shall have a sense of humor and that she shall be well read.

It is unfortunate that the reading of classics in high school rarely influences the student to any further reading along the same lines. This fall I have been instructing a large class of beginning normal students and have found them quite unable to place quotations or explain allusions unless the quotation was taken from or the allusion had reference to something in the literature they had been required to read in school. One day, in a test, I asked each member of the class to name five books that she would like to have with her if she were cast upon a desert island. Most of the lists submitted named the Bible and three of four light modern novels. "The Rosary" was in great

demand, and several of George Barr McCutcheon's stories. One young woman, however, said she wanted the Bible, Burke's speech on Conciliation, Virgil's Aeneid, "The Fighting Chance" and "St. Elmo." As I read these lists, I was reminded of a remark made in an after-dinner speech by Mr. Gelett Burgess. (I am not quoting exactly.) "The writer of best sellers," he said, "is largely dependent upon the nice little high school girl with her hair in a braid who goes to the library and demands 'a good story.' Just as soon as she learns that life isn't all Richard Harding Davis, and love isn't all Robert W. Chambers, and death isn't all Hall Caine, it'll be all up with us."

But whether these girls of mine learn or not, they are going out to teach, and to hand themselves down in their pupils as every teacher must. At which point, of course, the question arises, "What are you going to do about it?" My answer is that I am going to try to make these young people realize their responsibility so that they will cultivate a taste for good reading even though they have passed the years when that taste should be forming naturally and pleasantly. I have said to them, "A fine book is your true friend. In it you can find companionship in sorrow and in joy. It will never sneer at your misfortunes nor be jealous of you in your happiness. Do you lack, in your daily intercourse, the society of the polished and cultivated? You can find it in books. Do you seek all knowledge? You can find it in books. Are you young, and do you desire life and adventure, joy and inspiration? All these you may find within the magic covers. Are you old? You may find rest and reminiscence, gentle philosophy, and forgetfulness of care. Charles Kingsley says,

When all the world is old, lad,
And all the trees are brown;
And all the sport is stale, lad,
And all the wheels run down;
Creep home, and take your place there,
The spent and maimed among;
God grant you find one face there,
You loved when all was young.

If you do not find the one face there you may, at least, take joy in finding there the books you loved when all was young."

"All this," I have said to my students, "is what books should mean to you and to your pupils. If you have not cultivated a taste for good literature, begin now. Read something worth while every day. Don't feel obliged to read a great deal, and try to find something that will give you pleasure. It is an entirely wrong idea that influences people to cherish a respect for earnestness and erudition that wearies them. Tiresome books discourage people from learning. If you pursue such a course as I have suggested, your literary taste is bound to improve, and your literary appreciation is bound to increase. Find some one who will read aloud with you. Strive to increase your vocabulary, and to polish your daily speech. This will, in time, so cultivate your ear that poor and weak English will offend it, and polished speech be a joy."

Let us suppose that our young teacher, blessed with a natural or acquired taste for good literature goes forth to teach in a rural school where, sooner or later, she asks herself this question: "How can I influence my boys and girls to love reading and to read what is worth while?"

In working out this problem, the rural teacher has one decided advantage over her sister of the city in that her pupils have fewer outside interests and fewer artificial amusements to keep them from reading. The country child is more likely to spend his evenings at home, since he frequently lacks such sources of joy and inspiration as the moving picture show, the vaudeville, and the roller skating rinks. His teacher will not hear with painful frequency, "I seen that in a movin' pitcher." The library of a rural school may be small, but if the books are well chosen, scarcity of numbers need not prove a serious handicap. Lincoln is far from being the only one great man, whose early education was obtained from a few books. The teacher should not, however, be satisfied with a small library, but should do everything in her power to bring about its increase.

Having now in imagination brought the teacher, the child, and the book together, let us see what the teacher can do to influence the pupil to "mind his book" as our grandfathers used to say. She can influence all her pupils, but her most effective work will be done with children from eight to twelve years of age, since those are the habit forming years, when as Bagley

says, "The mind is wax to receive and marble to retain." Ideals, high or low, are now in process of formation. An increased interest in reading characterizes this period, and, unless discouraged, will increase steadily until twelve years, at which time the interest takes a rapid rise, reaching its greatest height at fifteen. Boys show a preference for books of travel, adventure, and biography, while girls read fiction, especially fiction in which girls of their own age figure. Unfortunately, many so called "books for girls" are trash. They are weak, pointless, and poorly written. Louisa Alcott's books are a shining exception to this rule and she has some able successors. But as some one has said, "The tradition seems to hold that anything will do for girls." Fortunately, many excellent books are of equal interest to boys and girls, and not infrequently girls like stories of adventure as well as boys do. The idea that a weak, poorly written book, is not injurious because it contains nothing openly harmful is a mistaken one. The ideas which children gain from books are their constant associates and must help to mould their characters. Books often form the back ground of their day dreams and, since this is so, children will to a certain extent, at least imitate the characters they meet upon the printed page.

There are various ways in which a teacher may stimulate interest in good literature. She may read a particularly vivid and interesting bit from some story and then simply remark that the book is on the library shelves, or that she has the book and will lend it. If the teacher can afford to own a few books for lending purposes, she will frequently find that the children consider it a privilege to borrow from her, and that there will usually be a waiting list for such a book. A casual reference to a book in connection with something in a geography or history lesson that suggests it will often stimulate interest. Encourage the children to discuss the books they read and to write compositions about them. An imagined meeting with a favorite story book hero or heroine is a popular subject. When quotations occur in their reading or other work say, "From what is that taken?" or "Who wrote that?" They are pleased to be able to tell and feel that it is worth while to have remembered. Always expect children to know the authors of the literature they read. I find many teachers negligent in this respect. Yet it is easy to train

children to our interest in the matter so that if an author's name is not given, they will ask for it. A new book may be used as a supplementary reader. If there is but one copy, it may be passed from hand to hand. When this is done, the interest is often intense till the story is finished.

Much poetry should be read and memorized, but it is better not to teach a poem than to spoil it in teaching it. Arlo Bates tells us that his little nephew, when asked if he liked Blake's "The Tiger," which he was memorizing, replied, "We don't have to like it; we only have to learn it." There are some poems that children like even when poorly presented. Of those suggested by the Regents for memorizing, I have found especially durable, Emerson's "Concord Hymn," Holmes's "Old Ironsides," and Tennyson's "Sir Galahad."

The teacher should often read aloud to her pupils poems and stories, with no suggestion that she is doing this for any reason outside their pleasure and her own. She may sometimes shorten the morning exercises a little to allow for her reading or she may occasionally read a little at close of school, cutting short sometimes one class period, sometimes another. The rural teacher usually has more freedom in making such a slight change of schedule than has the teacher in a city school.

Reading aloud is very valuable for many reasons. Its first appeal to children doubtless comes from the pleasure they feel in sharing a common interest. The appreciation of the reader adds to the grasp of the listener, unhampered by the mechanical difficulties of reading which usually trouble him; and often a hearty laugh together develops a bond of sympathy, which nothing else could produce. The merry story is particularly appropriate for the close of day for the wise teacher tries to send her children home with cheerful hearts, despite any trials and tribulations that the day may have brought forth.

In this matter of reading aloud, the influence of beautiful English should be considered. A child acquires his vocabulary from what he hears at home, at school, and in the street, rather than from what he sees upon the printed page. In listening to reading aloud, he becomes familiar with fine English and with words that are new to him. The slovenly English to be heard in many homes, the excessive use of slang and the constant inva-

sion of foreign tongues should make us realize that if we have any regard for one of the most beautiful and flexible of languages, we should take some definite stand to prevent its degeneration.

As the teacher reads poetry to her pupils, she will find, especially among the older children, only a few who love poetry for its own sake. Most children want a story. For this reason, I should recommend for reading aloud some of the old English and Scotch ballads,—those about Robin Hood are excellent,—Longfellow's "Evangeline," "Courtship of Miles Standish," and some of the poems from "The Tales of a Wayside Inn"; Macaulay's "Lays of Ancient Rome," and Scott's "Lay of the Lost Minstrel" and "Lady of the Lake." Whittier's "Snow Bound" is often well liked, though the narrative is slight. For suitable short poems for reading and memorizing, the teacher should consult such collections as:

Poems by Grades—Gilbert and Harris.

Selections for Memorizing—A. W. Skinner.

Lyra Heroica—Henley.

Golden Numbers—Wiggin & Smith. .

The Golden Treasury—Palgrave.

Such books and short stories as the following represent material desirable for reading aloud: The "Uncle Remus Stories," by Harris; Hawthorne's "Wonder Book," "Tanglewood Tales" and "Great Stone Face," Lamb's "Tales from Shakespeare," Irving's "Rip Van Winkle" and "The Legend of Sleepy Hollow," Hale's "Man Without a Country," Kingsley's "Greek Heroes," portions of the "Pilgrim's Progress," Ruskins "King of the Golden River," Scott's "Ivanhoe," Hughe's "Tom Brown's School Days," Baldwin's "Golden Age" and "Fifty Famous Stories Retold," Kipling's "Jungle Books" and "Just-So Stories," Laura E. Richard's "Golden Windows," and Pyle's "Stories of King Arthur" and "Merry Adventures of Robin Hood."

When a teacher has several or all grades in one room, she is restricted as to what she may read, unless she reads quietly to one group while another is otherwise occupied. However, there are stories that suit all ages. Few children are too young for "Epaminondas and His Auntie" or "How the Whale Got His Little Throat" and I have never yet met anyone too old to enjoy them.

In the effort to influence the taste of individual children, great tact is necessary. Unless you know a boy very well and he has great confidence in you, don't tell him outright that the dime novels in which he revels are trash. Give him something better to read and remember, in selecting, that it must be a "good book" from his point of view as well as from yours. Stevenson's "Treasure Island," Pyle's "Men of Iron," Cooper's "Leather Stocking Tales," Doyle's "Adventures of Sherlock Holmes," Poe's "Short Stories," and some of the best of Henty and Jules Verne are excellent for this purpose.

Give the little girl who likes the "Elsie Books," "Little Women," "Rebecca of Sunnybrook Farm," or "Anne of Greene Gables"; and to the older girl who reads Laura Jean Libbey's novels, "John Halifax," or if that seems too heavy, "Little Moorland Princess" or "Soldiers of Fortune." Of course, the rural teacher will not have all or nearly all the books I have mentioned in her library, but she will probably have some of them or others that will be satisfactory substitutes.

Through discrimination acquired in reading and influenced by his teacher, the country child should come to appreciate the beauties of his natural surroundings and to realize that he has some very decided advantages over the city child whom he perhaps regards with envious eyes. This is an end to be desired and worked for. I once heard an elderly man say, "I never realized till long after I left it, that my boyhood's home was a beautiful one. I thought it was just like every other farm. I know now that it was very beautiful, but I never dreamed that, as a boy. I wish some one had told me."

Tell your children so in such a way that they will realize its truth, if their surroundings are beautiful. Help them to cultivate good taste so that they may see the ugliness of advertising signs set up in green fields or on picturesque elevations, and the unattractiveness of fantastic fences and houses adorned with gingerbread work.

Last, but not least, don't be discouraged. We teachers all feel at times like Sisyphus as he strove to push up hill the big stone that always rolled back to the foot again. Despite your loving labors, your bad boy may go on reading "Nick Carter" and smoking cigarettes till he sets the barn on fire, and your

silly girl continue to peruse the "Fireside Companion" and chew gum. But if you make them realize that there is something better if they would only seek it, they may some day desire for their children the good they would not accept for themselves. I do not believe that any good, unselfish work is lost, though sometimes it seems to be.

Little do you know your own blessedness, for to travel hopefully is a better thing than to arrive, and the true success is to labor.

Scientific Farming As Developed Through Public Schools Of Ohio

Submitted by Lester S. Ivins, District Supervisor of Agricultural Education, Columbus, Ohio.

When Governor Cox appointed Frank W. Miller Superintendent of Public Instruction it was a recognition of high ability and distinct merit. Mr. Miller was appointed in July, after having served as State School Commissioner of Ohio for two and a half years. As Commissioner of Schools he imparted energy and life to the office and established a lasting influence on the schools of the State.

Mr. Miller was born in Montgomery county a short distance west of Dayton, and is regarded as distinctively a Dayton product. He attended country schools in Montgomery county and later prepared for college at the Lebanon University, where he took preparatory work. Subsequently he graduated at Dartmouth College, where he received the degree of Master of Arts.

After his graduation he taught in various schools, advancing to the position of teacher in high schools, and finally came to the city of Dayton, where he became teacher of science in Stivers high school. While engaged in that capacity he, in collaboration with Prof. Aug. Foerste, wrote a text book for high schools on physics. This book was published by the Scribners and became and remains very popular and is regarded as a standard authority.

After some years' experience as a teacher in Stivers' high school, Mr. Miller spent a year in Europe at the great centers of learning for the purpose of studying science and especially in studying scientific agriculture. His object in studying scientific agriculture in Europe was to discover, if possible, why and how it was that Europeans produced so much more per acre than we could, or did, in America. To accomplish this purpose he worked on farms in various sections of Germany, looking into conditions at first hand and experimenting under tutelage of

skilled agriculturists with the methods and practices in vogue in the various localities.

One of the first and most significant facts he learned was that agriculture was taught in the elementary schools, the children being actually brought up upon agriculture. He was told by successful agriculturists that that was the secret of their success in agriculture. The discovery impressed him with the importance of teaching scientific agriculture in its elementary forms in the schools of a country, and he returned to America thoroughly convinced that this plan ought to be adopted in the schools of this country.

After returning home he resumed his work of teaching in Stivers' high school, where he remained until elected to the office of School Commissioner of Ohio in 1910. After serving in that high office for two years he was re-elected in 1912, and continued to discharge the duties of the office until his appointment by the Governor as the first incumbent of the newly created office of Superintendent of Public Instruction.

Proposal 28, submitted to the people by the Constitutional Convention of 1912, provided that the office of School Commissioner should become a constitutional one instead of a statutory, as it had always been in the past. It provided that the name of the office should be changed to State Superintendent of Public Instruction and that the incumbent should be appointed by the Governor for a term of four years instead of being elected for two years.

This Proposal 28 was introduced into the convention by S. D. Fess, President of Antioch College and Congressman from the Sixth Ohio District who had studied the educational systems of many States and who strongly recommended the appointive method.

Frank M. Miller was appointed Ohio's first Superintendent of Public Instruction by Governor Cox, in July, 1913.

Immediately after his election in 1910 to the office of Commissioner of Common Schools, Mr. Miller went before the legislature and reviewed his experiences and discoveries in Europe and asked the legislators to pass a law requiring the teaching of agriculture in both the elementary and high schools throughout Ohio.

This proposal received instant attention because the farmers of Ohio had for four years been persistent in petitioning the legislature for such an enactment.

The legislature responded to Mr. Miller's request by passing what is known as the Cahill law, introduced by Senator Michael Cahill, of Preble county.

The Cahill law provides that agriculture shall be taught in both elementary and high schools outside of city districts. The law further provides that the Superintendent of Public Instruction shall be given four supervisors to assist in carrying out the provisions of the law. These four assistants are known as State Supervisors of Agricultural Education in common schools. The State was divided into four districts, each supervisor thereby being given, or allotted one-fourth of the State, or twenty-two counties. Under the Cahill law, which secures the teaching of agriculture in the elementary and high schools of the State outside of city districts, the State Superintendent of Public Instruction is constituted the head of the Board of State Supervisors of Agricultural Education and so places on him the responsibility of executing the law.

As a result of the law the study of agriculture as a regular and enforced branch has been introduced into 900 high schools of the State outside of city districts.

Although the city schools were not required, under the Cahill law, to teach agriculture, over half of all the high schools in the cities of the State have adopted the study of the course prescribed by Mr. Miller, and in addition have added the work of gardening and floriculture.

These subjects had been taught before in some schools, but not systematically nor under authority of the State. In many of the city schools these courses are fully equal to such courses taught in the normal schools of the State.

The four State Supervisors of Agricultural Education, at the direction and under the guidance of Mr. Miller as State Superintendent of Public Instruction, have given instruction in State Agricultural teaching at township meetings, county institutes and teachers' institutes and other meetings. In the prosecution of their work they have spoken in more than five hundred Farmers' Institutes on farming subjects as they were related to school

work. They have met with county fair boards and advocated the holding of young peoples' agricultural exhibits at each annual county fair.

These meetings have resulted in the introduction of this new idea by one-half the county fair boards in the State. As a result of this agitation and persuasion on the part of Prof. Lester S. Ivins, supervisor of agricultural education in the southwestern district of Ohio, the Montgomery county fair board has offered more than \$700 in prizes for such exhibits made by young people of the county, besides offering two or three free trips to Washington City to boy and girls who win prizes on exhibits shown at the Montgomery county fair this year. This indicates the success of the work locally and forecasts the importance the subject will assume in the future.

Through the assistance of the State supervisor the State-wide contests in boys' corn growing was made an accomplished fact. Ninety per cent. of the boys who have entered the contest this year came from the public schools and most of this number continue as pupils in the elementary and high schools where agriculture is taught under the supervision and by the direction of Mr. Miller. It may be added that a large majority of these boys were induced to enter the contests through the persuasion and influence of the supervisor in the respective districts.

In addition to the work of the supervisors as outlined above the four supervisors have constantly been in touch with boards of education in the various cities and districts and have succeeded in most cases in securing the introduction in the schools of the study of this branch of useful, practical education. They have visited schools and have suggested to teachers how to proceed in teaching agriculture. They have met with women's and men's clubs and encouraged them to offer prizes for various kinds of contests to be entered by the young people under their charge.

Live-Wire Arguments

From

State Superintendents of Education

["A Comparative Study of Public School Systems in the Forty-eight States" was published in December, 1912, by the Russell Sage Foundation. The States were ranked educationally as they were believed to meet ten specified tests of efficiency. Believing that the Superintendents of Education in some of the States would be willing to express themselves in reference to the report, the editor invited them to do so for the benefit of the readers of Educational Foundations. The replies will be published from month to month. All of them contain interesting statements and the series will reflect the spirit of present day education in America in a manner hardly possible in any other way. No person sincerely interested in our educational progress can afford to miss these contributions. Our thanks are due and are publicly offered to these champions of the schools who thus favor us with their opinions.]

This Month

New Mexico—*Alvin N. White*
North Dakota—*E. J. Taylor*
Georgia—*M. L. Brittain*

General School Conditions In New Mexico

SOME STATISTICS.

By Alvin N. White, State Superintendent.

(From First Annual Report Since New Mexico Became a State.)

The school districts in the State number 1,000. One or more schools were conducted in all districts but 46, which is a better showing than for the year 1910-11, when there were 89 school districts having no school. Of those having school 16 had one month; 61, two months; 247, three months, and 163, four months. Therefore, 487 schools out of the total of 1,578 had less than a five months' term in 1911-12, as opposed to 527 in 1910-11. The number of teachers in the State is 1598; 510 men, 1,088 women. The total amount paid for salaries in 1911-12 was \$622,902.10, the average annual salary for men being \$369.68, and for women \$389.85. This is a very fair showing, but it must be borne in mind that this includes all teachers, principals, and superintendents. As a matter of fact, 438 teachers receive less than \$200.00 a year. I believe this condition will materially improve under the revenue bill passed by the last legislature, which contemplates an annual expenditure of not less than \$300 for each school room.

The school census has not increased to any considerable extent, the 1912 census showing 101,648 children of school age, five to twenty-one years, being an increase of 1,603. The enrollment is approximately 60,000, and with the opening of schools under the State-aid law of 1912, this showing will be greatly improved and when school buildings are adequate our compulsory attendance law can be made very effective in securing a better enrollment and attendance.

The above statistics are quoted for your information and to

show that our general school conditions are improving. Undoubtedly, greater progress will be shown the coming year.

Weak Districts.

During the school year 1911-12, the amount of shortage was 1,104 school months. Estimating the cost of holding school at \$60 per month, approximately \$66,000 additional will be needed to maintain schools in these weak districts for five months. From reports made as to funds, it is believed that the increased local levies and the aid from the State reserve funds will be sufficient for this purpose. The only troublesome feature of the bill is the lack of any prescribed method of drawing these funds as the same are needed. Many districts are now in need of a portion or all of the \$300 available for each district. After consultation with the Attorney-General, the Department has inaugurated the policy of having the unpaid warrants for lack of funds presented to and endorsed by the county treasurer "Not paid for lack of funds, to bear six per cent. interest until paid," and of waiting until it was known what local funds would be available in such districts before drawing any of the State-aid funds. I believe it would be advisable to have legislation to prescribe, in detail, the method of securing and using the State-aid fund, without the necessity of forcing the teachers to wait for their monthly salaries.

In this connection I desire to say that Rio Arriba county failed to make the requisite fifteen mills local levy in weak districts, and I do not see how the districts of this county, as conditions now exist, can obtain any State aid. Yet, the Constitution requires a five months' term. In some of the other counties a few districts failed to make such fifteen-mill levy and they, too, cannot as I interpret the law, draw from the State-aid fund. This is a condition that confronts the legislature and ought to be called to its attention.

Aid for Rural School Houses.

Having, therefore, provided the necessary funds for our minimum school term in the various weak districts, the next matter to which serious attention should be given by our legis-

lature, is that of providing proper school houses for our school children. It is not enough to maintain school for at least five months, but school buildings, with the proper heating, lighting and ventilation should be provided for the children of the State; in order that the best results may be had from such terms of school. From reports furnished this office, we find that of the 1,007 school houses, 788 were reported as owned by the districts; 219 as rented; 357 of these were of adobe construction. Of the 775 reported, 124 were reported excellent; 353 good; 169 fair; 164 poor. From the best information I have been able to gather, there are comparatively few of the school buildings in our rural communities that are even fair, so far as school purposes are concerned. At present, there is little prospect in a great many districts, for obtaining proper school buildings because the taxable property of the districts is very small and the income from all sources will not be sufficient to enable these districts to build school buildings for some years to come. It is to be hoped that the coming legislature will see its way clear to do something looking toward giving assistance to weak districts in the matter of erecting comfortable school buildings, as it has already done to aid them to have at least five months' terms of school. Not only is it the duty of the State to provide school accommodations, but such accommodations should be modern, and well suited for school purposes. I believe it would be wise for the legislature to follow the example of some of the other States and pass a law creating a commission, consisting of the State Superintendent of Public Instruction, the President of our State Board of Health, and an architect to be appointed by the Governor, the duty of this commission being to pass upon plans and specifications for school buildings, outside of our incorporated cities. Some means should be immediately taken to improve the ventilation, heating and lighting of our public school buildings, which have or may be hereafter erected. This department is at present furnishing plans and specifications from an edition prepared by my predecessor in office and is doing everything it can to improve the present poorly constructed and ventilated school buildings and to see that future ones are built according to the most modern and up-to-date plan.

Compulsory School Law.

In this connection I desire to say that it is not possible in a great many districts to enforce our compulsory school law because no adequate accommodations have been provided for school children. If we are to educate all the people, as it was contemplated by the founders of our free school system, it should be made possible for every child living in a community having fifteen children or more of school age, to attend school within a distance of three miles and the privilege should be afforded such pupils to attend the nearest school, without regard to district or county lines, by appropriate legislation.

County Administration.

Considering the poor provisions now made by law for the administration and supervision of our school affairs by our county superintendents, I am pleased to report that the general school conditions in the various counties are in a most satisfactory condition. As stated in my address to the teachers at Albuquerque, the most urgent demand is for closer and better supervision of the rural schools throughout the State, and lack of expert supervision appeals to me as the most apparent weakness of our country school to-day. In the administration of our school affairs, the county superintendent occupies, perhaps, the most important position. Under existing salaries paid to county superintendents, we cannot expect expert supervision. The salaries are too small to justify his properly supervising the schools of his county at his own expense and it will be necessary to secure legislation fixing the duties and powers of the county superintendents and providing for them an adequate salary. When our law is so changed as to fix definitely the duties of the county superintendent and his powers have been enlarged and increased, particularly in the matter of selection of teachers, and he has been required to discharge these duties and responsibilities, much better results will be obtained.

Industrial Education.

Pursuant to Section 2, Chapter 52, Laws of 1912, I appointed, on July 1, 1912, Mrs. Theresa B. White, as State Director of Industrial Education. As such official she visited thirteen county institutions and received therefor, under the provisions of said

bill, the sum of \$320. To December 1, 1912, she had been paid \$416.65 as salary for her five months' services and had expended \$283.32, being in full of the amount of expenses available to December 1, 1912. She also visited many counties, when the institutes were not in session and discussed industrial education with the view to introducing it into our schools. January 1, next, she will be succeeded in office by Miss Manette A. Myers, of Albuquerque, who has been educated in industrial education and is an experienced teacher. In my visits to the various counties of the State, I have found that the recognition of industrial education by our last legislature has met with almost universal approval. A resolution endorsing industrial education for our schools was unanimously passed by the New Mexico Teachers' Association, at its meeting held at Albuquerque, November 8-9, at which meeting there was an actual enrollment of 710 teachers. However, under the provisions of our industrial education bill no provision was made for office expenses of the State Director. This is a serious defect and hampers the work of this important branch of education. Much ought to be done by way of appropriation to carry on the important work of industrial education. If our legislature feels that it is unable to give us much other needed appropriations for this work, certainly it ought to give a small sum to bear the office expenses of the State Director, and I trust that this subject, which is a real emergency, will receive favorable consideration by the legislature.

County Schools.

The majority of the counties will establish, under the provisions of our County High School bill, Chapter 57, Laws of 1912, high schools the coming year. This bill is a most excellent one, except it discriminates against the counties of Luna and Sierra, because neither county has sufficient population to proceed to establish a high school under such bill. Luna county already has a splendid high school at Deming and would the coming year proceed to make it a county high school, if it were not for the fact that it has not sufficient population under the terms of this bill. Complaints against this feature of the bill have been

received by the department from both counties. I trust you will recommend to the legislature that this bill be so amended as to enable these two counties to establish their county high schools.

Renews Recommendations.

I desire again to call your attention to the recommendations for needed legislation, made in my first report to you, namely: The passage of a free text book bill. Such a bill was introduced into the last legislature, but no favorable action was had thereon. I have discussed this proposed bill in public addresses and in private conferences throughout the State during this year and nowhere have I found any serious objections to such a bill, but on the other hand I have found almost an unanimous sentiment favorable to it. A great saving in the cost of books may be had. It gives an equal advantage to all our children to obtain at least a common school education. It is in line with the most progressive educational thought of the day. It is to my mind the most important step in educational progress that our State can take. Having embodied this recommendation in your first message to the legislature, I trust you will again recommend it in your forthcoming message.

Free Traveling Libraries.

In view of the fact that our rural communities have little or no facilities for reading and in response to the request of county superintendents and the rural school teachers and officers, I hope the legislature will give serious consideration to the establishment of a free traveling library system, under the supervision of this department, for which an appropriation of \$1,000 would be sufficient, provided an additional appropriation of \$1,000 is made to employ a competent person to supervise such a system as well as to give advice and encouragement toward the securing and owning of libraries by the various school districts. This matter was also considered by the last legislature, but no action was taken on account of the fear that such libraries would spread disease. During the past few months, this department has made

investigation of conditions as to this objection among the twenty-eight States having traveling libraries, and of the twenty-five reporting, there is not even a single case of transmission of disease through this means, although many of these States have maintained such systems for twenty years and have handled 50,000 or more books each year. My visits to the various counties during the year have more fully convinced me than ever before that such a law ought to be passed immediately.

Revision of School Laws.

Intelligent effort was made by this department, acting through a committee on revision of school laws, to rewrite our school laws so that same would be more concise, briefer, clearer and easier to consult. A comprehensive bill was carefully prepared by such committee on revision and introduced in the legislature. Same was not favorably acted upon, largely, I believe, because of many matters crowding the legislature. At the coming session, I believe, the legislators will have sufficient time to give consideration to this much needed piece of legislation. I renew my recommendations for the rewriting of our school laws and trust such recommendations will be made by you to the legislature. A year's experience in the office has convinced me that there are numerous matters of needed school legislation, but if our laws can be rewritten as above recommended, all these various matters may be adjusted.

Training of Teachers.

Attention should be given to Section 8, of Article XII, of the Constitution, which directs that "the legislature shall provide for the training of teachers in the normal schools or otherwise, so that they may become proficient in both the English and Spanish languages, to qualify them to teach Spanish-speaking pupils and students in the public schools and other educational institutions of the State; and shall provide proper means and methods to facilitate the teaching of the English language and other branches of learning to such pupils and students." I hope

that there will be legislation looking toward the establishment of such departments in connection with our normal schools. It is my belief that it would pay the State to give a year's training with all expenses paid for, say, 100 teachers each year for a period of three years, provided arrangements are made subject to approval by the State Department of Education. To do this would require approximately \$15,000 per year. During the past year \$3,075 has been paid out for four weeks' institute attendance at the rate of \$15 per teacher for 205 teachers, under our existing law. The law allowing \$15 for each teacher holding a third grade certificate who attends institute for four weeks has been in force for some time, and I believe, it has not served its purpose well. I believe that the legislature would do well to repeal this law and make such appropriation and such arrangements as may be necessary to carry into effect the above provision of our Constitution.

Present Emergencies.

Under this head I desire to state what I consider are the real emergencies for this department and to request most earnestly that you embody same either in your annual message or in a special message to the legislature, namely:

First—Funds for Industrial Director.

The lack of any office expenses for the State Director of Industrial Education has been referred to, under the heading of Industrial Education. For the time the first incumbent has been in this office, she has occupied desk room in this department and the department has shared with her a part of its office contingent fund. The present year, the department must be maintained on a less amount than heretofore and will not be able to share any of its office contingent funds with the State Director of Industrial Education. This leaves her, as stated, without one cent of office contingent funds. At least \$500 should be appropriated for this emergency.

Second—Funds for Publications.

No funds are now available for printing the course of study for the common schools, and the institute manuals for 1913.

All copies of our former edition have been exhausted. This matter was considered at the last meeting of the State Board of Education, but no solution of it was made. Teachers from all parts of the State are daily writing the department for its course of study for the common schools and within a few weeks the institute conductors and instructors, and teachers will be calling upon the department for copies of this publication. Committees of the State Board of Education have practically completed the manuscript for both of these publications and it will certainly be unfortunate for the schools and a backward step to fail to publish same. Heretofore special appropriations have been made for this purpose, but no appropriation was made by the last legislature. An appropriation of at least \$1,000 should be made for meeting this emergency.

Third—Appropriation for Uniform Blanks.

Section 13, Chapter 97, Laws of 1907, provides for uniform blanks for the schools of the State. This law has never been enforced because the legislature has never seen proper to give this department an appropriation for such purpose. To my mind this is one of the most important matters connected with this department. There is now no uniformity in the matter of keeping records in the county superintendent's office and no uniformity of blanks in the State for school purposes. The County Superintendent purchases such office supplies, etc., as he desires, and the Boards of County Commissioners allow the bills for same out of different funds, usually, the general school fund of the county. The districts purchase warrant books, teachers' registers, record books, and other blanks wherever they desire and usually pay an exorbitant price and these bills are paid out of the district school funds. You will see that under such a system the records and blanks for school purposes are costing the State several thousand dollars more than they would if printed in bulk, and furnished by this department, and also, that the reports from this department cannot be accurately obtained under so many different forms of blanks and varying methods of keeping accounts in school districts and counties. I trust the legis-

lature will realize the importance of this law and will give this department an appropriation sufficient to enable it to comply with this provision of law.

Fourth—Insufficient Office Help.

The work of this department has so increased that it is badly handicapped in getting out the actual, necessary matters. Its force is so inadequate that I consider it a real emergency. By all means the legislature should give to the department one additional clerk, so that its necessary work may be gotten out without delay and in a systematic manner.

Fifth—Insufficient Office Space.

At this time I desire to call attention to the fact that the Department of Education still has insufficient office space. In the very near future I trust the State will appropriate sufficient funds for the erection of an Education Building, which should be planned and built for educational purposes only, either as a wing to the present capitol building or as in the case of the State of New York, a separate building. This may seem to be planning too soon for the future, but a great deal of room is needed for filing the numerous publications from the Department at Washington, publications of the various States, various institutions of learning in our country, as well as preserving all the files and records of our own department. If such a wing to our present capitol, or a separate building, could be built to be used exclusively for this department, the important documents and files could be preserved, and would within a few years become almost priceless. In the meantime, however, this department should be given adequate room for all its various purposes.

Sixth—School Board Elections.

While the last legislature provided for elections of Boards of Education in incorporated cities, no provisions were made for such elections in incorporated towns and villages. Section 1567,

C. L. 1897, should, therefore, be so amended as to provide for an election different from the election for town officers, for our incorporated towns and villages, according to the Constitution.

In conclusion, I desire to say that the educational forces of our State are working in unison to build up an educational system that shall rank among the very foremost in our country; that these forces and this department realize that no revolutionary measures need be passed by any future legislature; that we are just building up our system and have the school systems and the best educational thought of our sister States as a guide, and, as our wonderful resources are developed by the intelligent and progressive citizens of this State and those who cast their fortunes with us, with an equitable and just system of taxation, with the proper administration of our eight and a half million acres of public school lands, and with the handling of our school funds with the same business-like methods employed in other financial transactions, there is no reason to doubt that New Mexico will make more rapid progress educationally than is being made by any of our States.

All of which is respectfully submitted.

A handwritten signature in black ink, reading "Abner B. White". The signature is written in a cursive style with a long horizontal line extending to the right.

Educational Outlook in North Dakota

BY E. J. TAYLOR

There are a great many things in the educational field in this State that are very encouraging to those engaged in school work. Our schools are far from being perfect and are not yet meeting all the reasonable demands that may be made on them.

North Dakota boasts of strong higher educational institutions and of high schools which are the equal of those in any State in the Union. The rural schools have not kept pace with the other portions of our school system and there has not been the marked progress in these schools that may be found elsewhere in this State.

During the early years of statehood for North Dakota the attention of the people was constantly directed toward the importance and necessity of building up the higher educational institutions. Public sentiment was aroused in their favor. The State Legislature appropriated money liberally for their support and as a result we have the splendid institutions of which every citizen of the State is justly proud.

Our high schools next received attention and it was not long till public sentiment was aroused in their favor and with the same results.

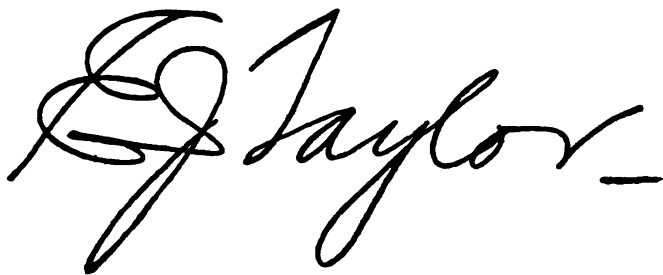
It was not till 1908 that the people began to realize that the one room or county school was not receiving the attention its importance demanded. Investigation disclosed that less than ten per cent. of our pupils ever complete the eighth grade and that a larger majority of the pupils of North Dakota were receiving all their educational training in the country school.

From that year forward the attention of the people of the State has been constantly directed to the importance of strengthening the country school. A systematic agitation has been kept up for the betterment of educational facilities for the country children.

As a result of the crusade for better country schools we have laws which have proved decidedly beneficial. Some of the things our recent laws provide for are:—

1. Annual meeting of school officers of each county.
2. Transportation of pupils who reside more than two and one half miles from schools.
3. Term of school must be seven months each year.
4. Compulsory attendance of pupils between 8 and 16.
5. School house plans must provide for proper heating, lighting and ventilating.
6. State aid to high schools.
7. State aid to rural graded and consolidated schools.
8. Apportionment of State inspectors of high and rural schools.
9. Liberal encouragement of the consolidation of weak country schools.
10. Better qualified teachers and longer terms of school.
11. Teachers' pension fund created. Provides for retirement of teachers on from \$350 to \$750 annually.
12. Creation of State board of education.
13. Ample provision for the preparation of teachers.

North Dakota has made a good beginning and while we find many things to commend we also find many weak spots. If the good work that is now being carried on can be continued for a number of years that state will possess a system of rural schools, many of them consolidated, that will be a credit to her progressive people.

A large, stylized handwritten signature in black ink, reading "B. Taylor". The signature is written in a cursive style with a long horizontal line extending from the end of the name.

As To Georgia

BY M. L. BRITTAIN

The Russell Sage Foundation within the last few months has expended a large amount of time, labor, and money in the preparation of a comparative study of the public school systems in the forty-eight States of the country.

To secure anything like a just comparison of our educational progress conditions must be relatively the same. For instance, it is not at all just to compare the rank of Georgia in school matters with that of Minnesota or any other Western State with an immense school fund derived from the sale of wild lands, etc. Some of them have millions of dollars from this source, while our school expenditures must be met from tax levies. Above all, however, any reasonable person will understand that any Southern State with almost half its population negro, and largely dependent, is in a widely different situation as contrasted with the average Northern or Western commonwealth. Furthermore, this dependent half of our people a generation ago was almost 100% illiterate. Notwithstanding the bi-racial burden upon the shoulders of the white people of the South the progress made during the last forty years has been at least fair and in many places highly creditable. The despondent pessimist, therefore, who occasionally "views with alarm" and weeps over our "shame and disgrace" is, I think, unduly excited. In the period mentioned—practically during the last generation—negro illiteracy has diminished in this State from 92.1% to 36.5% and white illiteracy during the same period from 27.4% to 7.8%. This is not a bad showing considering our impoverishment by reason of the war and the necessity of providing for a double system of schools. A fairly accurate record as to the progress made and the work done in Georgia may be secured by comparing the Southern States from Virginia to Texas, where conditions are much the same. If this is done it will be found that Georgia is ranked about midway in this Southern group, being placed above Mississippi, North and South Carolina, and Alabama.

M. L. Brittain.

Literary Snapshots

BY MARY ELEANOR KRAMER

Appleton & Co. have completed with the eighth volume a new edition of J. Bach McMaster's "History of the United States." This volume includes "Social conditions, the unrest throughout the country, admission of California to the Union, woman's rights movement, beginnings of spiritism, revolution in Europe, that of Cuba, Dred Scott case, repeal of the Missouri Compromise, all the seething disquiet and activity are discussed in this volume, which ends with Lincoln's inauguration."

Boys and girls will welcome with delight Ernest Thompson Seton's "Wild Animals of the Yellowstone." Like a number of his previous books, this volume is profusely illustrated by the author, and by photographs of his own taking. This book is a companionpiece to his earlier volume—"Wild Animals I Have Known," for he takes up with the understanding which he alone has of the animal life of the woods and the mountains, the roving creatures of the wilds and gives us in his delightfully human style the real psychology of the inhabitants of the great government park. (Wild Animals of the Yellowstone, Doubleday, Page & Co.)

No teacher can afford to miss Burton J. Hendrick's article on "Children of the Steel King's," in September McClure's magazine. This is the story of the remarkable school system which was planned by the United States Steel Corporation for its city of Gary, Indiana. A city reared almost in a night on the sand-dunes of Lake Michigan.

President Hyde of Bowdoin College has written a book for boys, called "The Quest of the Best," which the T. Y. Crowell Co. will publish.

Persons accustomed on their tours of ancient Boston to browse around in the subterranean vaults of the Old South meeting house at the head of Milk street will now find placed in a Cornhill store the collection of books formerly housed in the church cellar.

One of the most helpful of the recent books is *The Story of California*, by Henry K. Norton. This is a vivid, animated history, in one volume, of a great and romantic state, and covers the ground from the earliest records, tracing the marvelous progress from the days of the aborigines through the Spanish occupation, with the labors of the friars, picturing the stirring times when the United States took possession, describing the scenes which attended the discovery of gold, and relating the splendid development down to date. The author is a thorough Californian, with the ability and genius to provide a book for the people. (*The Story of California*—A. C. McClurg & Co.)

"*The Splendid Quest*" is a series of fascinating life stories of famous knights. The prologue, "*The Pilgrim's Way*," is a beautiful and fitting introduction for the stories which follow. Tales of this kind have always a fascination for young people, and to the charm of these stories is added a noble, underlying motive in the lessons taught which cannot fail to be in the highest degree beneficial. The stories are suitable for children of from eight to fifteen years. By Basil Matthews.. ("*The Splendid Quest*," Fleming H. Revell Co.)

"*A Scout of To-day*" will hold a unique interest and appeal for boy readers. It is full of wholesome excitement, heightened by the presence of a French-Canadian Assistant Scout Master with a touch of Indian in him. The book contains the words and music of a new song for the Boy Scouts. The author is Isabel Hornibrook. ("*A Scout of To-day*," Houghton, Mifflin Co.)

"*The Old-Fashioned Woman*." In this work Elsie Clews Parsons has gathered together primitive fancies about womankind. The material is intended as food for the feminist and the anti-

feminist, and the author cleverly observes that "feminism and anti-feminism are both made up of primitive ideas." She considers that the two schools will get into better agreement when they become ethnologically conscious of themselves. ("The Old-Fashioned Woman," Putnam Co.)

The National Magazine for August contains an interesting character study, which all literary people will appreciate,—a sketch of the life of and work of Dell Monger, author of "The Wind Before the Dawn." George Wharton James, the author of the sketch, has given to the article that versatility, which has marked all of his excellent work appearing in recent issues of the National. To this number Ella Wheeler Wilcox contributes one of her inimitable travel articles—"On the Road to Biskra," while Joe Mitchell Chapple recounts "Just a Jaunt to Cuba, and a Visit to the New President," all of which are of the greatest importance to the well-informed teacher.

The Bookman for September is replete with good things, chief among which is "The World's Greatest Library," by Phillip G. Hubert, Jr. This library is the Bibliotheque Nationale of Paris. The article is beautifully illustrated. Other entertaining features are "Chapters of My Life," by J. H. Fabre, and Arthur Bartlett Maurice's "About New York with O. Henry."

"What Can Literature Do for Me," by Prof. C. Alonzo Smith (Doubleday, Page & Co.) is a book for the everyday man and the students, as well as for the scholar and the litterateur, for whether you are familiar with books, or whether you are only beginning to know some of the literary immortals, Prof. Smith's book comes either as a hearty introduction, or as the greeting of an old friend. It is a book designed to help one to a wider appreciation of literature, and although small in body, it is the result of the most discriminating boiling down of a mass of material.

The September issue of Scribner's magazine contains an interesting article from the pen of Thomas Nelson Page on "The

Romantic Founding of Washington." He says, in part: "Fresh with the beauty of youth, situated at the pleasant mean between the extremes of heat and cold, possessing a climate which throughout the greater portion of the year admits of the only proper life—life in the open air—with sunshine as sparkling and skies as blue as Italy's, Washington presents to those who wish them political, scientific and social life, and soon it will offer a literary and artistic life, which is second to none in the New World, and may possibly, in no long time, be equal to that of the old world. In Washington one may, according to taste, hear discussed the most advanced theories of science in every field, the political news of every country, and enjoy a society as simple, cultured, and refined—or, if one prefers it as pretentious, as empty and diverting—as any capital of the globe." Other enjoyable features of this number of Scribner's are Roosevelt's well illustrated nature study—"The Life History of the African Lion," and Henry Van Dyke's poem—"Daybreak in the Grand Canyon of Arizona."

"Virginia," Ellen Glasgow's latest book, has been hailed by critics all over the country as one of the most interesting and illuminating treatments of the woman question published this year. Indeed, so intense has been the interest in the possible future of her heroine, that a sequel is already being demanded.

In the classical outdoor theatre at Carmel-By-the-Sea, Cal., a play, entitled "Fire," by Mary Austin, recently enjoyed one of the most distinguished successes ever produced by the Western Drama Society, under which name the artistic colony there produce their plays.

Familiar as she is with stage technique, Mrs. Austin produced the piece herself with the assistance of V. L. Kellogg, stage manager.

"Fire," which goes back to the prehistoric times of man, and deals with the aborigines of California, symbolizes the battle within the soul of the strong man to hold fast to his natural strength of purpose of largeness of endeavor in spite of the deadening effects of civilization. It is taken from the old Indian

legend of the gift of fire to men, a story which Mrs. Austin holds to be superior in poetic scope to the Greek legend of Prometheus. From her previous play, "The Arrow Maker," and from her many stories dealing with the Indians, Mrs. Austin has established herself as one of the few persons really writing authoritatively of the American Indians and Indian lore.

"Comrades from Other Lands," a little book from the press of Fleming H. Revell Company, is the story of the emigrants which are making of our United States a veritable "melting pot." The book portrays what the emigrant is doing for us, and what we are doing for him, and will be found useful to teachers in all grades. A glance at the contents will insure us interesting facts, as some of the subjects treated are: Hard Coal and Breaker Boys, Children in Canneries, With the Lumber-Jacks, In the Construction Camp, etc.

"Mary Anne's Little Indian and Other True Stories for Children." Mary Anne lived in the long ago and she had many strange experiences. Other stories deal with a big fish, a parrot, a big bear and many things the children love to hear and read about. The book contains good pictures, splendid type and is altogether a very pleasing little story book. ("Mary Anne's Little Indian and Other True Stories," A. Flanagan Company.)

"The Taste of Apples." One of the most delightful books of fiction of the year is Jenette Lee's "The Taste of Apples." It is a book of life, which will be understood by those who have learned the meaning of life in its truest and best sense. The dear old cobbler is a most lovable character, while "Mother" is all that the word implies. "Mother" and her apple pies, produce a miracle in the life of a young man, who is being carried away on the ocean of a vast city's fast life. "The Taste of Apples" leaves a "good taste" in one's mouth. ("The Taste of Apples," Dodd, Mead & Co.)

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October Book List

Education and Ethics. By Emile Boutroux, Member of the Academy. Authorized Translation by Fred Rothwell. Cloth, 236 pages. Price \$1.50. The Macmillan Company.

Sight Reading in Latin for the Second Year. By Hiram H. Bice, Head of Latin Department, DeWitt Clinton High School, New York, N. Y. 12mo, cloth, xii+159 pages, with maps and illustrations. Price 50 cents. Ginn & Company.

The World Literature Readers. By Cecila Richmond. Volume III. Mexico and Peru, America, Canada. 12mo, cloth, xi+276 pages, illustrated, 45 cents. In Volume III is shown the remarkable scope of native and primitive life upon this continent, and in the American section the literary work of our own nation is drawn upon more than was possible in Volume I. Ginn & Company.

The See and Say Series—Book One. A picture book teaching the letters and their sounds, with lessons in word building. By Sarah Louise Arnold, Elizabeth C. Bonney and E. F. Southworth. 12mo, cloth, 128 pages, illustrations in colors, price 35 cents. Ginn & Company.

Manual for Teachers to Accompany the See and Say Series—Book One. By Sarah Louise Arnold, Elizabeth C. Bonney and E. F. Southworth. In this manual each lesson of Book One is presented in detail, with illuminating suggestions about methods of presentation, teaching, devices, games, dramatization, and seat work. Cloth, 214 pages. Price 50 cents. Ginn & Company.

English for the Non-English. By Norman Fergus Black, M.A., D.Paed. Cloth, 211 pages. Regins Book Shop, Limited, Publishers and Booksellers, Regins, Sask.

Type of Schools for Young Children. The "Dewey" School. Reprinted from the Elementary School Record, published by the University of Chicago in 1900. Paper, 80 pages. One shilling net. The Froebel Society, 4, Bloomsbury Square, London.

Marriage and Genetics. Laws of Human Breeding and Applied Eugenics. By Charles A. L. Reed, M.D., F.C.S. Fellow of the College of Surgeons of America; Member and Former President of the American Medical Association; Professor in the University of Cincinnati. Cloth, 178 pages. The Galton Press, publishers. Cincinnati, Ohio.

History and Principles of Education

By Charles H. Davis, B. S.

Principal, P. S. No. 25, Borough of Queens, N. Y. C.

Lesson II—Outline and Plan—Criticisms—Oriental Education.

China.—Confucius, educator; his name the most revered among the Chinese, wrote the Chinese classics; to him and his disciples are due the religion, language and literature of China; ancestral education; memory trained; women not educated; precepts for morality.

Criticisms on Chinese Education.

1. It is not under government control.
2. It had no interest beyond the boundaries of China, and regarded no literature save the Chinese classics.
3. It was non-progressive, having made practically no improvement for many centuries.
4. It cultivated memory to the neglect of the other powers of the mind and placed more emphasis on the acquirement of knowledge than on the development of human faculties.
5. It obtained its results through fear, not by awakening interest in or love for study.
6. It produced a conservative, dishonest, untruthful, cunning, and cowardly people.
7. Women were not educated.

The Schools of China To-Day.

It is only within a few years that China had any educational system in the Western use of the expression. There were many private schools, and the study of the ancient classics made up the higher education of the people. It was not until 1905 that an

imperial decree provided for a new system, establishing schools throughout the country and setting forth the curriculum to be pursued. So rapid was the progress of the movement that by 1910 there were over 42,000 schools in operation, with about 1,300,000 pupils, excluding the mission schools and the very large number of private schools. By the opening of 1912 these numbers had increased to 53,000 schools and 1,600,000 pupils. The percentage with respect to population is small, but it will be seen that the growth is very rapid. Moreover the influence of these schools upon the private institutions is very great. The statement of a recent writer seems justified, that the present renaissance of learning is comparable only to the great revival in Europe which followed the taking of Constantinople by the Turks.

As to the modern system it should be said that in the well-to-do homes it is common to find private tutoring, particularly before the child enters the public school. A Kindergarten school is officially recognized, but such schools are not generally attended. In several of the missions strong work of this nature is being done.

The Elementary and Primary School is divided into the lower grades or forms, covering the five years from about the age of eight to the age of twelve, and the upper (higher, or secondary) grades or forms, covering four years. This is followed by the Middle School, of five years, corresponding to our High School. From the Middle School the pupil may enter college, and most mission colleges have preparatory departments which are called Middle Schools.

The Government has model schools of primary grade in the large cities. There are also professional vocational schools of one kind and another, such as schools of embroidery.

India.—Caste system of education; no organized schools; memory trained; imagination stimulated by environment; promoted philosophy and mathematics; originated the decimal system of notation; Buddha, their leader.

Criticism on Hindu Education.

1. Not universal, a large part of the people being excluded.

2. Based on castes and promulgation of caste system, which is baneful.

3. It depends too much on memory.

4. Has no philosophy of education and, therefore, is non-progressive.

5. Does not honor women; but excludes her from advantages.

6. It produces a dreamy, indolent, self-satisfied, selfish and non-progressive people.

7. It makes the people self-reflective.

Persia.—State education. Boys in control of State from 7 to 15, 15 to 25 for training, 25 to 50 for service. Physical training exalted; intellectual training neglected; moral training by prayers and proverbs. Schools of Magic taught astronomy, astrology, and alchemy.

Zoroaster, a great teacher and philosopher, was the founder of Persian religion. He also founded the magic priesthood. His philosophy was dualistic, the struggle between good and evil in the world.

Criticisms on Persian Education.

1. The State robs the family of its inherent right to educate children.

2. It neglects intellectual education, giving undue prominence to the physical and moral, and demands too great a part of the active life of man.

3. It makes the highest aim of education to prepare for war, and therefore does not cultivate the arts of peace.

4. It excludes women from the benefits of education.

Israel.—The Jews were the ancient people of God. They reached their greatest power and glory during the reigns of David and Solomon. They occupied Palestine, Jerusalem, the capital. They lost their independence in becoming subjects of the Romans, 70 A. D., and since have been wanderers over the face of the earth.

Children received much education at home; theocratic form of education; mature men for teachers; girls trained for household duties; schools of rabbis at Babylon, Jerusalem and Alexandria, where religion, history and law was taught; sayings of

rabbis collected into Talumd, during second to sixth centuries A. D. Schools of Prophets taught philosophy, history for patriotism, poetry, medicine and law for priests and prophets; produced many of the books of the Old Testament.

Criticism of Jewish Education.

1. It exalted the home and insisted on the control of the children by their parents.
2. It gave woman an honored place in the home.
3. It taught obedience, patriotism and religion.
4. It provided only for Jewish children.
5. It was mild and generally wise in discipline, and not admitting of corporal punishment until after the child was 11 years old.
6. It developed an honest, intelligent, progressive, God-fearing people.
7. It produced some of the greatest poets and historians of the world.

Egypt.—Priestly education. The caste system existed, but not in such a strict sense as in India. It was a modified caste system, and the education suited to respective castes.

Invented geometry, made use of music, developed mathematics, philosophy, religion and natural sciences. Women received some training.

Criticism of Egyptian Education:

1. It was dominated by the priests under the caste system and did not recognize equality of man.
2. It encouraged greater respect for women, than other oriental systems, but took little account of her intellectual training.
3. It made use of concrete methods at least in writing and arithmetic for the first time in history.
4. It was non-progressive in its elementary education, the father generally expecting his son to follow his calling.
5. In higher education it was justly noted, as it attracted wise men from Greece and Rome to study its science and philosophy.

Educational Foundations Normal Reading and Study Course

What Does It Mean?

Read the statement of the United States Commissioner of Education:

"The total number of (Normal School) graduates, 18,278, was large enough to supply less than 25 per cent. of the demand for new teachers in the elementary schools of the country."

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List of Books Suggested for Reading and Study in the Educational Foundations Normal Course

Note.—The books starred are required, the other optional.

History and Principles of Education.

- *Monroe—Text Book in the History of Education.
- Painter—History of Education.
- Quick's—Educational Reformers.
- Spencer—Education.
- Harris—Psychological Foundations.
- *Horne—Philosophy of Education.
- Butler—The Meaning of Education.
- Bagley—The Educative Process.
- *Strayer—The Teaching Process.
- Colvin—The Learning Process.
- James—Psychology (Briefer Course).
- *James—Talks to Teachers.
- *Dewey—The School and Society.
- *DeGarmo—Herbart and the Herbartians.
 - Report of the Committee of Ten.
 - Report of the Committee of Fifteen.
- *Dexter and Garlich—Psychology in the Schoolroom.
- McLellan and Dewey—The Psychology of Number.

Methods of Teaching.

- *Taylor—Principles and Methods of Teaching Reading.
- *Taylor—Composition in the Elementary School.
- McMurry—How to Study.
- *McMurry—The Method of the Recitation.
- McMurry—Special Method in Arithmetic.
- *Walsh—Methods in Teaching Arithmetic.

- Smith—The Teaching of Elementary Mathematics.
 *DeGarmo—Essential of Method.
 Chubb—The Teaching of English.
 Carpenter, Baker and Scott—Teaching of English.
 *Dexter and Garlick—A Primer of School Methods.
 Redway—The Teaching of Geography..
 Mace—The Teaching of History.
 Jones—Teaching Children to Study (The Group System Applied).

School Management.

- *Shaw—School Hygiene.
 *Taylor—Class Management.
 Bagley—Class Room Management.
 Perry—The Management of a City School.

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Educational Foundations

VOL. XXV.

NOVEMBER, 1913

No. 3

NOTES

The following request comes from Jean T. Ayer of Cortland Normal School, whose article on "Literature in the Rural School" greatly interested our readers last month:

"The quotation marks in which I enclosed the final sentences of my article on "Literature in the Rural School," have been omitted in the October number of Educational Foundations. I shall be gratified if you will publish this statement and thus spare me the wrathful comment of other lovers of Stevenson."

That lovers of Stevenson may be still further deterred from wrathful comment we quote the quotation and applaud the sentiment: "Little do you know your own blessedness, for to travel hopefully is a better thing than to arrive and the true success is to labor."

We have been encouraged to believe that the Educational Foundations Normal Reading and Study Course announced last month will be of considerable benefit to many ambitious teachers whose opportunities have been somewhat limited. Even Normal School graduates may find profit in following the course. A few changes may be noted in the book list, the object being to make it strong and comprehensive without undue length. Superintendents and principals may render a real service by encouraging teachers to avail themselves of this plan for better preparation. It may be well to turn at once to page 202.

The Course of Study for the Elementary School

William Lyndon Hess.

It is generally conceded by educators that a course of study should be both rich and reliable. In the make it rich, it often becomes heterogeneous and ponderous, and attempt to make it flexible it becomes unstable as well. The reason for this is that the framers of a course of study think that richness means fulness, and flexibility, elasticity. Such thinking is wrong and pernicious.

Rich a course of study must be if it is to be really a course to begin with, and a course of study, in the true sense of that word study, to end with; but rich in its depth rather than in its length. A long course of study is no better than a short one, unless it has a depth that is entirely lacking in the short course. Better any time and anywhere a short course with depth than a long course without depth. Depth does not imply fulness. A well may be ever so deep and yet not full. By depth is meant power resulting from the content of a course of study.

Flexible, also, a course of study must be, but not elastic. It is not something to be stretched to the limit so that subjects never intended for introduction into a school may be included. A flexible course of study is one that is practical; it is one that is easily adapted to the use of those coming under its influence. It is a course of study which is notable for what it omits as well as for what it contains, for its provision for the future needs of the pupil as well as for his present needs. The future is scanned, as it were, to see what is to lie in store for the boy and the girl who are growing into manhood and womanhood. After all, a course of study is for the pupil. It is he that the course is to fit.

A prominent New Jersey educator has said that the great fault with many courses of study is that persons not educators have determined them to a large extent; such, for instance, as book companies whose business is to sell books, and boards of

education that are prone to think of policy instead of the pupil in the school. It is obvious that when a course of study is so determined it will be a long one, but it will not be a deep one; it will be full, perhaps, of this, that, and the other fad and fancy, but it will not be rich in reality.

Another educator, a New York City principal, has said that were a new city in Oklahoma to choose a superintendent of schools whose first duty was to make a course of study, that city would have a course made up of everything to be found in the courses of all the leading cities of the United States. Here again would be found a full course; and, no doubt, the superintendent would proudly call it a rich one, but would it be rich? Reason cries out against such a course, and yet it is only too true that there are courses like the one imagined which are mere patchwork, full to satiety but not rich, and perfectly elastic but not flexible.

The course of study for the elementary school is for pupils between the ages of five or six and thirteen or fourteen years, boys and girls from the first grade through the eighth. It covers practically eight years of the life of an individual, and eight of the most significant years of that life.

Every year is very important, but the most important after the first year are the seventh and the eighth, and yet so disregarded is this fact that most of the overcrowding of classrooms comes in the first year and much that is impracticable comes in the last two years. Many boys and girls never reach the eighth year, and of those who do reach it and complete it the great majority do not go any higher. The responsibility, therefore, put upon the elementary school is a most grave one, but one that has to be assumed and assumed with the greatest possible courage at the command of all those whose duty it is to mould the pupils who compose the school.

The course of study is the power which makes or mars the future destinies of the vast army of pupils in the elementary schools of our country. It is the touchstone of endeavor and the lodestar to success.

The purpose of the school is to teach, and it employs men and women to perform that function. What to teach is just as important as how to teach. The course of study embraces the

what, and the teacher is presumed to know the how. The course outlines the material; the teacher uses method on that material. Without the material the method would certainly be useless.

What then should a course of study for the elementary school contain, and what should it not contain? To be explicit and definite it should contain (1) arithmetic, language (English and German both), reading, writing, geography, history (United States), civics, physiology and hygiene (with emphasis on hygiene), nature study, music (strictly limited), drawing (likewise strictly limited), manual training, sewing, cooking, physical culture, and moral instruction; and it should not contain (2) algebra, geometry, physics, Latin, and English and general history.

That arithmetic should be carefully graded and intensely practical is an axiom, but one that is so self-evident that it is often disregarded. Drill in fundamental processes should be given constantly after they are first presented, and all unnecessary topics (such as exchange, for example) should be entirely eliminated. Accuracy and clearness of statement of processes, rules, and definitions should be demanded throughout, and much review should be given.

The time devoted to arithmetic should be evenly divided between oral and written work, and of the time devoted to oral problems one-half is needed for mental work as distinguished from the purely spoken explanations of processes.

Let percentage be introduced very simply as early as the fifth grade when decimals are introduced, and let interest be introduced immediately at the beginning of the sixth grade. Business arithmetic should have a very prominent part in the course, and its introduction belongs to the fourth grade.

There should be mensuration in the course; but we do not advocate all the intricacies of the topic as are found in many arithmetic books, because much of the mensuration taught is of no practical use to the boy and the girl whose education is to stop with that received in the elementary school. The idea that arithmetic is a disciplinary subject is being scouted to-day, therefore, we must leave out of our arithmetic teaching all that is irrelevant to practical usage and lead our pupils to study the subject as though it were a part of their very life now and to come.

Arithmetic is something that can be used every day; it is not mental gymnastics for the mathematical prodigy.

Language embraces composition, both oral and written, spelling, and technical grammar. Because of its wide use German should be taught, as well as English. The foreign language must not be left to the seventh or the eighth grade, but should be introduced when the language feeling is ripe, which is when the child is at least ten years old. Therefore, German should be introduced in the last half of the fourth grade. Some will say that there is not time enough for it, and they, perhaps, will be those who believe in reading Shakespeare in the elementary school, and teaching physics and algebra. Find time by omitting Shakespeare, algebra, and physics.

Too much time can not be devoted to language, provided the language course is made broad and practical. While technical grammar should be subordinate to composition and correction of common errors in speech and in writing, yet it should not be so subordinate that pupils leave school above the fourth grade unable to analyze, parse, diagram, and conjugate.

Spelling is very important, and should be applied to every subject in the course. One reason why so many boys and girls are poor spellers is because spelling is looked upon as a subject confined to the spelling book. A spelling book is only an aid to correct spelling. The words of a history lesson, or of any other lesson, must be spelled correctly as well as the columns of words in a spelling book.

Too little time is devoted to real reading teaching. So much time is devoted to covering a wide range in literature that our pupils leave school unable to enunciate clearly, pronounce correctly the most commonly used words, and know what they have read, because they do not feel and do not have the proper sense of word values. Let there be plenty of literature, but let it be used in only a supplementary way and not be considered as the be-all and end-all of reading.

The literature should be most carefully selected and graded, and Shakespeare omitted entirely, because his plays were written for more mature minds than we have in the elementary school. They can not be properly read even mechanically on account of the peculiar vocabulary which lies entirely outside of the child's

interest and real comprehension. In our work in literature, let it be borne in mind that the aim is primarily appreciation of the good which lies within the range of the child's interests.

The reading period should be a period devoted to the formation and use of correct habits of enunciation, pronunciation, and interpretation of thought. Do not entirely discard the good graded school reader; it still has a place in our reading classes, a place which the classics can not fill, no matter how valuable they are in other ways. Many of the classics to which so much time is given encourage stumbling and hesitation in reading, because they are naturally foreign to every day usage and contain much that can not be properly interpreted by the child. Our pupils must leave school reading with considerable ease and fluency, and able to show others by their expressive reading that they understand what they read.

Writing as such should not be taught higher than the fifth grade. During the first five years much time should be allowed to formal writing teaching, during which year, under careful supervision, strict attention is given to correct writing position, proper pen-holding, free and easy movement, good letter formation, uniformity, and muscular control,—all of which will insure perfect neatness and legibility. It is a great waste of time to teach writing formally above the fifth grade, because if it is really taught and closely watched during the first five years of school life, there is no need to fear what kind of writing we will have during the last three years.

The course of study does wrong to dole out geography and history in sections. These subjects should be offered, beginning with the fifth grade, as one continuous whole, but, of course, most carefully graded according to the capacity of the child in each successive grade, in order that as the grades advance a more intensive study may be made. Supplementary geographical and historical readers should be used, and the course enriched by ethical lessons and the study of many pictures by means of the stereoscope and stereopticon.

Below the fifth grade, in geography, much attention should be given to local geography as to the State and city or town in which the pupils live, and this kind of work should be carried on and reviewed more in detail as the years advance. Throughout

the entire course in geography, the geography of the United States should be most strongly emphasized, so that when our pupils leave the elementary school they will know where and how important Passadena and Bath are even better than they know Vladivostock and Lyons, and the resources of Pennsylvania even better than those of Brazil. It is surprising how ignorant they are of the United States where they live, and how well acquainted with the United Kingdom where they do not live and, which in all probability, they will never visit or have intercourse with.

In history, below the fifth grade, biography should be given without a text-book. The biographical narratives should be so arranged that the pupils will be given a breadth of view which will enable them to study American history better. History must be made a live subject, full of interest, instead of a dry-as-dust subject full of facts which can be easily taught from the outlines which are so commonly used to-day. Current events are a valuable part of the history course.

Civics as contained in the course of study should be intensely practical; its purpose being to show the child what society is and what his place in society is and will be. The making of a good American citizen is the primary aim.

Together with practical civics which teaches the child how to make the most and best of his environment, there must be the formal teaching of government—national, State and local—with special emphasis on the government of the pupil's own State and city, or town, which gives the child a lively appreciation of the machinery of government. Just as soon as history is presented so soon should civics be. If the subject is vitalized by a good teacher, the pupils will be "stimulated to original thought and inquiry," as one author aptly puts it.

Let hygiene be taught in every grade, and, incidentally, physiology below the sixth. Beginning with the sixth grade, however, let both be taught intensively and in a practical way; so that a boy and a girl will really study, for example, the eye from a good manikin, or, if possible, from the eye of a cow, instead of knowing only half the subject from a text-book, or the teacher's explanation.

With the aim of nature study clearly in mind, there will be real nature study in our schools, and not sham. That aim is to cause children to love and enjoy nature by training them to ob-

serve the plants and animals that lie about them. Such study can begin in the first grade, and continue through the fifth, so as not to interfere with the intensive study of physiology, which, as has been said, should begin in the sixth grade. Nature study can very profitably supplement the work in geography.

Music and drawing are very valuable culture studies, but as outlined in some courses of study and as pursued in some school systems they are magnified far beyond their real importance. Below the fifth-grade they should be regularly and pedagogically taught to every pupil, but above the fifth grade they should never be taught to all pupils. Many boys and girls have no musical and no artistic ability worth the time and expense of trying to cultivate. More waste of time, energy, and money is made in presenting music and drawing to children who require something more cultural, than is wise and necessary. Beginning with the fifth grade only those pupils who have previously shown an especial aptitude for either or both subjects should be required to pursue music and drawing further. To them it would be inexpedient to permit the dropping of that which will ever stand them in good stead, while as for those pupils who have neither the taste nor the talent for either or both music or drawing, it is very unwise and unreasonable to force them to take that which will do them more harm than good when such pupils should be required to take something more practical and useful.

Experience in the classroom teaches that music and drawing are about as educative and cultural to some pupils as Greek and biology would be were they to be added to the elementary curriculum. Let them be taught and well taught, but not to everybody.

Manual training, sewing, and cooking are the useful arts, and the courses in them should be so arranged as to make them contribute directly to the life of the pupils both in and out of school, so that when they leave school they will know how to make many useful things in the right and most economical way.

Below the fifth grade manual training work should be done with paper, cardboard, and textiles; from the fifth grade on wood should be used.

Plain sewing for girls should begin in the fourth grade and run through the fourth, fifth, sixth, and seventh grades. In the

seventh grade garment making should be taught. Plain cooking should be offered in the eighth grade, and, with it, methods of serving the food cooked. Some instruction in housekeeping and sanitation should also be offered in the eighth grade.

Simple graded physical culture exercises are absolutely necessary in the elementary course. They tone up the system, and give the pupil a splendid chance at regular intervals to exercise the muscles of the back and arms and legs. Let the work be properly graded, and, by all means, eliminate fads, which physical culture teachers like so well; such as games and dancing that waste time and add nothing to the other exercises. Games and dancing can be better pursued outside of school.

Moral instruction should find a large place in a course of study, as it has to do with conduct which relates to the soul. To paraphrase, and now abideth mind, body, and soul; these three; but the greatest of these is soul.

Shall the instruction be formal and intensive? Yes, but not so formal and intensive that pupils get the letter but do not catch the spirit, and thus fail to be moral. The school should not only teach what is good, but also teach how to be good.

Six subjects have been mentioned as to be excluded from a course of study for the elementary school; namely, algebra, geometry, physics, Latin, and English and general history. They have no place in the elementary school curriculum, as they take time from subjects which ought of necessity to be taught, and they contribute nothing that will help the vast number of boys and girls who leave school before or at the end of the eighth year. They retard pupils by weakening their foundation in the essentials. Overloading the stomach is bad for digestion; so overloading the mind is bad for mental assimilation and power.

Secondary education has no place in the elementary school, and everything that savors of such education should be very rigidly confined to the secondary school. Because so very few pupils enter high school is no excuse for raising the upper elementary grades to high school standing.

Let our pupils leave the eighth grade prepared to enter high school successfully and continue their work there with success, because of a thorough preparation for high school work, or fully prepared to enter upon a vocation successfully, as the case may

be. In the elementary school where bed rock is struck only that should be attempted which can be done thoroughly; only those subjects should be taught, therefore, which can be taught well, for let it be remembered that the elementary school has its limitations as well as its possibilities.

Efficiency in Teaching by Pictures

Horace G. Brown, Massachusetts State Normal School.

Efficiency is the big word in business to-day. In educational administration it is having its try-out. In teaching it seems to lag. With this thought in mind I naturally noticed the wasteful and so unproductive methods in every day teaching of children in the public schools. I will take only the single case of unproductive use of picture material.

The Unproductive Use of Pictures.

Of course there is scant productivity because there is scant use. Then there is inefficient use of whatever material there may be at hand. Some teachers have no pictures, others a few. One teacher "refers" to a picture, "it is to be found" elsewhere if the pupil chooses, or happens to remember. Another teacher "shows" the pictures, holding them before the class where they must be distinctly seen by most of the pupils. Still another teacher carries them up and down the aisles too rapidly, or too mechanically. Then the pictures are "left on the table," for later examination which may never come. All these teachers give all the time they can afford to use of pictures, yet they are disappointed in their helpfulness. Why? They fail to measure the power they are using. They do not know why they fail. They do not know what they have allowed to go to waste. Let us consider the facts.

The Teaching Power of Pictures.

Let us suppose that every picture has more or less power to impress itself on the mind. Let us call this its teaching power. Whether this teaching power is secured to its maximum, or is wasted, depends upon the teacher's knowing its nature, and the principles of its transmission and reception by the mind of the pupil. Every teacher knows that a picture appeals to the mind through the eye. Therefore, it must be individually seen, and so thoroughly, so vividly, as to make its maxi-

imum impression on every pupil. For instance, it must come within approximately the same focal distance of every child's vision. It must be seen equally well by all. Therefore, a small picture should not be held before the class. It should be presented in the best way equally to each child. It should also be given enough time to make its full impression exactly, vividly, permanently upon each mind. These two points are constantly overlooked by the ever-busy teacher. This time amount varies with individuals. One child sees details slowly, another quickly. One sees by wholes, another is distracted by part. Hence individuals cannot be treated alike. Only experience with children can determine the length of time necessary for a successful "exposure." Let us recall the anecdote of two men who had ten minutes in which to see Westminster Abbey. One said, "You go round the outside and I'll go inside and we will do it in seven." Like some teachers, they did not allow, in the personal equation, for the necessary time for individuals to take in a thing. We all know we cannot time the fine efficiency of a work of art on our feelings with a stop-watch. Neither can we measure the efficiency of our teaching with pictures. Children cannot see a picture, that is absorb its picture-power fully, by "going around the outside," while "we go in," (that is our appreciation will not help pupils, if the teacher rapidly passes the picture down the aisles.) A pedometer can show the teacher to be a rapid efficient walker, but what about the measure of the power of the picture upon the pupil's mind? Will not that picture-power register higher, if the teacher were to pass twice as slowly and pass down each aisle, giving each pupil two twice-as-long looks? Will it not register still higher, if, on passing the picture, each pupil were given adequate time to satisfy his curiosity and his interest? Will it not go higher still, if the pictures are placed on exhibit, so they must be seen, and so there will be time for repeated examination and reenforced impression, as the pupil follows his interest in response to the picture's appeal? But by this time I hear the busy teacher saying, "But the time, the time is passing." Certainly; and the measure of the picture is registering higher and higher. Can we teach by the stop-watch? Or by the measure of the power of teaching to produce results?

The Greatest Efficiency Is the Only True Economy.

Efficiency in teaching secures the highest teaching power first. Then it secures such economy of time as is consistent with teaching power. Fortunately we have all this carefully worked out for schools. If we would only use it. Sets of 600 stereograph views, not only gives each pupil his individual look according to his personal visual need, but he has also the picture always ready in a variety of ways to get repetition of the first impression. The pupil can get the maximum effect in the shortest time, because of the clearer vividness, and because of the personal privacy of the pupil's seeing. The world is shut out for the time. The pupil yields to no other appeal than the pictures. A business-man appreciates this efficiency by concentration. So must the man who means business in education. So we conclude there should be a rich supply of picture material readily accessible, it should be individually studied in an adequate amount of time.

The Reasons for Unproductivity.

The business man seeks for inefficiency diligently and finds it quickly. Teachers and educators should also. They know that pictures are intended to awaken interest (whatever that may be) in every individual. But upon what does a maximum of interest depend? We know that in part it depends on the brightness and other attractiveness of the picture. That is, it catches our attention. But a deeper interest depends upon this transient, almost passive, attention becoming active and lasting. Real interest has not only attention, but also a sensation of nearness, of intimacy of the picture or object for the one interested. There is a feeling of one's ownness, so to speak, a sense of entering into possession of the picture, to enjoy it, feel it, to think it, to one's satisfaction. Now it is evident that teachers do not secure this more mature, vital, energetic interest, unless they use the teaching power of pictures to the utmost. Let us recall the earlier remark about scant unproductivity of some ways of using pictures. The teaching then described economized in minutes, words, steps, and yet for it got only a moment of fleeting, passive, inclination to be interested. This is the moment of

inefficiency. The efficient use of a picture changes inclination to an intensified, prolonged pleasurable mental activity. I have noticed in the pupil's use of the stereoscope we get these results in the maximum. It arouses curiosity, attention, and converts it into prolonged permanent interest.

Six Forms of Efficiency Often Overlooked.

1. Self education is the best education and it is true in the use of pictures. Stevenson said truly "the best education is a finger pointed,"—the child does all the rest. But this finger should keep pointing. The inclination to be interested must be directed again and again as one thing is mastered. Let us apply this principle to teaching by pictures. In the 600 views in a stereograph set we have a large and varied amount of material in the most efficient form possible, i. e., catalogued with cross references for every school subject, and with suggestive ways of using by the teacher and pupils. The teacher simply points the finger, let us say, to the stereoscope, it points (a thousand times) to the pictures; one picture points to another; each picture points to inquiry; inquiry points to reading the matter supplied on the picture and then to other book matter; reading points to knowing; knowing points to self expression, i. e., reflection, speaking, explaining to others; altogether they point to self development, the true course of all real education. This is wholly different from the old chance display of such pictures as the teacher chanced to possess. Here we have the business man's theory of efficiency actually accomplished.

2. There is an efficiency through division of labor. There is a familiar quotation from Charles Lamb to the effect that the school master needed to know a little of everything. In these later years we have inferred that, therefore, he should do a little of everything. He should, perhaps, photograph his own views or his own journeys around the world, make his own slides, collect his own prints, use them in his own hit or miss way. This is delightful freedom theoretically, but the worst slavery actually and the worst economy. It ends in great waste of effort. Both efficiency and economy lead school authorities to provide (a) suitable collections of illustrated material (b) adequate apparatus to display it individually, (c) the clearest and best

methods that experience has given. The teacher should be left to his special work of teaching. Others should provide the pictures and the methods. No business office or factory can be efficient without such division of labor. Neither can school rooms. Fortunately, we have no reason to delay such a division of labor in the schools, except the question of expense. But this purchase of illustrative material by the school authorities is the only true economy, just as it is in the purchase of text books. The teachers should no more be expected to provide adequate picture material than to furnish an adequate supply of books. We shall not get efficiency till we secure this division of labor.

3. There is an efficiency through the economy of nerve force. Whenever a thing is done in an imperfectly organized manner we get a loss from wear and tear. So teachers, with small supply of material and inefficient skill in their method, must be constantly working disconnectedly, and so under strain. The wear and waste of nerve force in both teacher and pupil through ill adjustments already mentioned is enormous. This waste of nerve force may be easily stopped by securing efficiency through careful organization for the work to be done. It is impossible to calculate what might be accomplished in schools if the nerve force of teachers and pupils now wasted were conserved and put to constructive uses. It is impossible to estimate the call of the school for children if teachers were regularly strong, steady, cheerful, well balanced, that is had their nerve force conserved to the utmost. The ill adjustments in teaching by pictures is only one, and is easily remedied.

4. There is an efficiency through self-directed success. We know that what we really accomplish by our own self-directed effort—initiative, will, wit, power—reacts mightily on our power to do again. We all know the tonic of success. So a picture, found by the pupil, thought about, applied to his learning by the pupil himself, is vastly more educative to him than being driven before a picture, or a series of pictures, and told to see this and that. It is here that the ready supply of a large number of pictures placed conveniently at the pupil's disposal, helpfully classified, tempts him to this self directed use of the pictures. This is the best of all uses. This tonic of self-directed success

gives great vigor of attack on other kinds of school work. What would every teacher be willing to give for a liberal amount of this vigor of attack by pupils? It makes a sickly school healthy. speaking pedagogically.

5. There is a valued efficiency through recall. I have spoken of the efficiency that secures an immediate result, or interest. I wish now to suggest a subtler, but more valuable result that makes for efficient living in school and out. We hear much about suggestion in schools and business advertisements. We often hear "that reminds me." This is what the pupil is constantly saying as he engages in a systematic picture study in the right way. The first picture, if efficiently used, becomes a permanent part of the subconscious possession of a pupil. As the later pictures come along, each illustrating its own lesson, they will recall much of the early pictures in one way or another. New associations are thus made, and the new vivid knowledge and the new experiences of the growing child are thus related as they increase. They are knit together with the most vivid, real, and self interested associations. This recall is the best method of review. And it becomes a good habit in adult life. For instance, a mechanic reading to-day of the Chinese Republic, recalls the associative pictures of China he saw in the school room. The power of recall depends upon frequent and systematic enriching of the mind with pictures, hence the need of a large supply. But the habit of recall in later life depends upon the efficient practice of recall in the early school years. In this we have a valuable asset, but we cannot efficiently use it without that liberal supply of pictures, that constant personal use, that individual interest, which come from self-directed effort.

6. There is an efficiency in community life. The group life, is much in thought to-day. Education feels it, prepares for it. Does picture-teaching do its part in this? If not, it is inefficient. The child having felt the picture, really got its power, wants to talk it—to his class mates, to his parents. He cannot help it. The imagination, touched by the picture power, must express itself, if not creatively, then reproductively. So the pupil teaches the class from the picture, explains what it means to him. He takes a few pictures home and the pleasure spreads and doubles as the family becomes interested. This is sharing with others.

They want more. When the pictures are all seen, there are the lantern slides, there is the school lantern in the school hall. There is the social evening of the neighborhood as they gather, old and young, to see the pictures of the world's famous scenes and industries. That purchased 600 school sets of pictures is still economical, it is still using its teaching power. It is teaching the community to substitute higher interests and pleasures for lower, to mix with and like other peoples of the community, to learn to co-operate with them for mutual gain. Not only this, but parents are again brought into living connection with the school and with their children. Social centers are rapidly increasing and are a great hope for civic betterment. But the financial support of the social center is often the big problem. Perhaps no more thrifty way can be found than by the triple use of the money invested in the set of illustrative material, namely individual self instruction, class instruction, community instruction. Social centers can no more afford to do without sets of illustrative material—pictures and lantern slides—than they can the ever present music players.

Summary.

There are two kinds of pictures, first, the varied collection that a teacher makes in many ways, such as post cards, photographs, cuts, illustrations from magazines and newspapers. The teaching power of these depends upon: 1, their wide range and careful selection for their work; 2, adequate opportunity of each pupil to see it near to; 3, adequate time to get interested in it in his own individual way; 4, opportunity to repeat and deepen the impression as often as he desires; 5, a simple convenient classification (by some envelope system) by which the children can personally learn to help themselves to pictures; 6, such picture study as the teacher can direct or pupils inspire. It is obvious that at best this chance collection is ineffective in each of the six ways. The number will be small; the range only as wide as the teachers' interest; the selection only as good as the teacher's taste. Adequate individual time and opportunity will vary with a teacher's mood and rush of work. The classification, if any, will be peculiarly the teacher's and not usable by the class. Fortunately, we have on the market (Keystone View

Company) available at moderate cost collections of pictures of the widest range, most carefully chosen by experts for school purposes. They are most plainly and helpfully classified for each school subject. A child can make his way among them. Hence a pupil can greatly assist the teacher in getting her picture material ready and often in teaching from it. As already pointed out, the method is correct because a result of wide testing by many teachers. The method is personal, securing to the pupil adequate vision, time, maximum of interest, study, reflection, expression. They are efficient in some special ways also, namely through, 1, self education; 2, vision of labor; 3, economy of nerve force; 4, efficiency through recall; 5, through a new community living; 6, through the tonic of self-directed effort.

The Need of More Study by the Student

**J. B. Robertson, Graham, S. C.
Supt. of Alamance County Public Schools.**

One of the things, if not the thing we need most to make our schools of more real worth is more study. The value of all school effort is found in two results—in practical knowledge gained and in mind development, both are very needful and necessary. We need the knowledge of the fact that five times five are twenty-five because we will want to multiply and make calculations in our business. We need also the developed mind that comes with learning this fact that we may contain it and retain it and that we may grapple with and understand other problems.

If we need more study the question arises what has cut off the supply ? If this is learned, then we may remove the prevention and get what we should have and need.

Lack of proper grading is certainly one cause of so little study. We cannot be interested in a thing we know nothing about. We do not expect the beginning child to study, because he has not the means, not having any knowledge of the thing to be studied. The part known about a subject is the means of studying the part not known. In studying and in learning we go and must go from the known to the unknown. Hence the more of the known we have in stock the more means we have. A supply of means encourages the pupil to do the thing. He has the consciousness that he can and he goes about the work. It is a thing that can be done and he undertakes it. It is not a heavy task to be dreaded. He is in his own field and latitude and he goes further, he sees the light, he feels the mastery and he studies. Adaptability of matter to mind so that mind can master matter is proper grading, and proper grading is fundamental in securing proper study.

The next question that arises in a natural sequence is, why

then, do we not have proper grading. Let me answer this briefly. It should be answered fully, but time and space forbid. The student gets credit for his desk mate's work. He hands in his parents' work of the night before and gets credit for that. If he is weak enough he will secure help on examinations and get credit for that. Then it is so nice to have a good report on the report card. Such a report says the student is doing good work, it pleases the student and the parent, and then the parent says we have such a good school this year, my boy is learning so fast. He did not get below 95 on anything, and up goes the boy in the grades of the school, that is. Then the boy wants to go on with his grade and crowd. (This is good so far as it goes and goes right.) The parent wants him to go on (and this is good so far as it goes and goes right.) The parent brings the little fellow over to school and tells the new Superintendent or new principal, or new teacher that last year he was in the fifth grade, and stopped just a little before examinations, but I know he can do sixth grade work. "Can do sixth grade work?" "When really he quit because he could not do fifth grade work, and has missed part of the fifth grade work besides?" These are some of the reasons why the grading is improper and hence why studying is neglected.

Another reason why studying is neglected is found in our graded system. I am not going to condemn the system, I believe in it. But it has its dangers and here is one of them. In a strictly graded school the teacher has her grade. The students are right before her. The temptation is to tell them. They are here. They came to learn. I am a teacher. I'll tell them. We can get along so much faster, and she uses the pour-in method. She thinks she is using that method. But if she was not using the pouring-out method, that method sat in as soon as she quit. If the teacher tells us and we are not required to tell her, we do not need to study and of course we do not study.

A boy came to me once to take a simple test in public school work. The first subject was arithmetic; simple problems in common fractions and in compound quantities; he could not begin to solve. I gave him the questions in English grammar. He was again helpless. The boy looked strong, honest, and intelligent. After we became acquainted, I asked him the trouble.

He said I have done high school work for three years. I said that is all the more reason that you should know this. He said I never did know this, not even when I went over it. I said that is an explanation. I ask him why he did not know it when he went over it. He said because on recitation the teacher just talked awhile about the lesson and then assigned another lesson. "We were not required to do any work, so we did not study. The teacher talked a little, nothing was required of us, so we did not study." The tale was told. I understood. It was a sad story. I asked him if he got good reports in school. He said yes, very good. It is not the number of grades you have been in. It is not the number of high schools and colleges you have attended. It is what you have mastered, and what you have mastered is measured exactly by what you have studied, thoroughly, yourself. We grow fat on what we eat and not on what another eats. We grow fat on what we eat and not on what we were supposed to eat but did not eat.

Another reason why the graded school proper does not lend to study is because the school session is too short, in many cases. All or nearly all the time is taken up in recitation. The students recite and are turned loose to study elsewhere and they don't do it. They go play ball, or go up town, or go down town, or go to a party, or go somewhere else. They do not study. Any daily schedule in our elementary schools is a failure that does not provide for study periods. The teacher should not only have study periods, but she should teach the student how to study. This is the fundamental science, the art of arts, that the teacher should teach the student. Teach him to see the parts and then the whole. Teach him to see the cause and then to hunt for the effect. Teach him to distinguish between the important and the non-essential. Teach him to know what he is studying about and then set himself to understand it. The writer once was given a class in English grammar, by another teacher. The teacher said the class was not getting along well. That they were badly tangled. I met the class for the first time and asked them the page of the lesson. They told me. I found the lesson was on the conjugation of the verb "to be." I called the attention of the class to the subject of the lesson. I took up the time of the recitation explaining the subject of the lesson. I

tried, and seemed to succeed, in making them understand that "to be" meant to "exist," "to live," "to breathe," "to abide." The book gave "am" and "was" as parts of the verb. I told the class that when I said "I am" I am asserting that I exist—That I am being, That there is such a being as I am in existence. I told them that when I said "I was" I was simply giving being to myself in past time. I then explained fully that tense means simply time. Step by step I explained the lesson by the fashion indicated. I taught them how to study the lesson. We took the same lesson for the next day. Next day we had a good lesson and we had good lessons from that day to the end. I taught them how to study.

Interest is the chief forerunner of all study that comes from within and it must come from that source before it is worth while. The teacher who interests her students in their work, has succeeded already. If they are interested they will study. If they study results will follow. To interest any student or any person you must begin where he is. You must make a vital connection between what is in his mind and the book matter to be taught. The proper time for doing this is in assigning the lesson. Tell just enough about the lesson to give the mind a touch of the new. Ask a few vital questions then and there, not to be answered there, but to arouse the mind, to make alive, to create interest. Do this very emphatically and very accurately; all interest is lost when the mind doubts and doesn't know what to depend upon. Do this interestingly. Interest begets interest. Do this wide awake and with life; life begets life and nothing else can.

A lesson taught by the teacher without having been studied by the student is almost a failure. It is much like pouring water on a ducks back. Most of it runs off. By this operation the student may get a little knowledge. But the probabilities are much against him for knowledge, and for mind development, that important part and lasting part of educational effort, even the probabilities do not exist. Development comes by exercise and where there is no exercise there can be no development. Commodious houses and ample equipment are good and very necessary. We rejoice twice that they are coming and more of them. But they are only aids. The final product that we want is the

developed mind, and this comes only through study. That teacher who has so aroused her student to want to know and to be and to do 'till he goes forth in search of truth "paddling his own canoe," only compassed by the teacher, has gloriously succeeded. The student will succeed because study develops mind and manhood. We often speak of the self made man. We say, "Here is a fellow who had poor opportunities, but he just worked his way through." There is no other way to get through in the field of letters. We say: "This fellow just studied at home." "He never went to school much." The fact that he studied is what counted and it made no difference whether he studied at home or abroad, or in a painted school house, the studying counted. There are no other men in the world of scholars except self-made men. And the way scholars make themselves is by studying themselves. Let us have more study by the student.

The City School of To-morrow

By Professor Scott Nearing, University of Pennsylvania.

The vitalizing progressive movement which has gripped the American public schools takes for granted the rather obvious proposition that schools exist for children. Such being the case, the newer type of school is being so organized that it will supply children's needs.

The most patent single failure of the old-type city school was the loss of pupils between the grammar school and the high school. Although the compulsory school law frequently requires children to attend school to the age of sixteen, unless they are gainfully employed, the completion of a grammar school education was made the excuse for a general exodus from school. In fact, while high school entrance examinations were required, the transition from the grammar school to the high school was almost, if not quite, as great a break as the transition from the high school to the college or university. Hence it happened that a hundred children entering the first grade dwindled to seventeen or eighteen in the first year of the high school.

In so far as this loss of children between the grammar school and the high school was due to the necessity of parents for the earnings of their children, it was perfectly legitimate and wholly beyond the control of the school. In those cases, however, where the loss was due to a lack of interest in school work,—and these cases, to put it conservatively, were numerous,—the school was wholly responsible. By providing a system of education which stopped at the eighth grade and began again at the ninth, it extended a cordial invitation to quit school at the age of fourteen.

The pupil in an old-time grammar school might well have referred to the high school in the Scriptural language,—“Between them and us there is a great gulf fixed.” This gulf was the entrance examinations and the complete change in method from class instruction under one teacher to instruction by subjects under different teachers.

Out of the dissatisfaction which the loss of pupils at the end

of the grammar school has everywhere occasioned, there has grown a vigorous movement to relate the elementary school more closely with the high school. The partial elimination of examinations, based on the so-called exemption system, whereby pupils who had done good work could pass from the elementary to the high school, constituted the first important step in the change. There are three other methods, however, which are of very considerable importance in working out a better adjustment in the school system.

The first of these methods is that typified by the work of Superintendent Spaulding, in Newton, Mass. Taking the over-age children from the upper grades and transferring them without examination to the high school under the direction of special teachers, Mr. Spaulding has been able to stimulate a new interest in school work, and to give the over-age child an excellent excuse for remaining in school. Such a device is, however, but a makeshift, since it affects the backward rather than the normal pupils.

The junior high school idea which has developed in Los Angeles and Berkeley, Cal., in Dayton, Ohio, in Evansville, Ind., and a number of other cities during the past five years, is an attempt to break up the school course into three periods. The first, an elementary course of six years, leads to the junior high school, a three-year course, which in turn leads to the three-year full high school course. The feature of the junior high school is a combination of work by classes and work by subjects, known as departmental work. The child is thus accustomed to a form of work by subjects before entering the high school. Such an organization by making a break at the end of the sixth grade (age twelve), and at the end of the ninth grade (age fifteen), and by diminishing the difference between the different branches of the school, greatly decreases the tendency to quit school in the early years of adolescence.

An even more radical department from the present scheme, and one which bears all the ear-marks of pedagogical and social worth, is the twelve-grade school inaugurated by Superintendent Wirt in Gary, and by Principal Gilbert in the Union High School at Grand Rapids, Mich. These officials asked the very pertinent question,—“Why make any break at all? If the school life

of the children is theoretically from sixteen to eighteen (from the first grade in the elementary school to the end of the high school), why put a premium on leaving at any point? It is almost as easy to organize a twelve-grade school as an eight-grade school, and the former possesses marked advantages over the latter." Outlining these advantages, the defenders of the twelve year system point to the fact that the equipment of a twelve-grade school (the equivalent of a high school equipment) may be used by all the grades. Expert teachers, ordinarily reserved for high school pupils, may teach more than the last four grades of children. Then, too, promotion by subject may be extended. "If a boy who cannot master his grammar is unusually capable in jewelry designing, should he not take third-grade grammar and tenth-grade jewelry designing?" asks Mr. Gilbert. The question is certainly in point. If the school exists for the child, why should not it provide for the needs of children? What harm may there be in having the child take one class of work in one grade, and another class of work in another? Aside from the administrative difficulties, which Superintendent Wirt assures us are not nearly as serious as we have imagined, there seems to be no good reason why the school should not fit its course to meet the needs of the school children. Furthermore, as Mr. Gilbert insists, the school life should prepare the child for the world life. The world in which the child will live consists of people of all kinds and ages. Why not, then, put into the school people of all kinds and ages? Certainly no harm will arise from contact between a kindergartener and a high school junior. Indeed, such contact will prove advantageous, rather than the reverse.

The city school of to-morrow will certainly not be a school of sharp distinctions between one group of grades and another group. Whether the junior high school idea will prove more acceptable than the twelve-grade school idea remains to be seen. Present indications, however, lead the progressive educational thinker to suspect that the city school of to-morrow will probably be a school of twelve years, with instruction by departments and by subjects, as well as by classes; with easy transitions from grade to grade, and with ample opportunity for every child to pursue those studies which are best calculated to develop his or her particular faculties.

The Teacher the Pupil's Inspiration

Page Milburn

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Modern pedagogical writers insist that the teacher should be a stimulus to the pupil, an excitant to his mental activities. This is a great improvement over former theory and practice. When the teacher was merely an assigner of lessons and a hearer of recitations, the rod and fear of the teacher's wrath were the stimuli to industry. Nowadays it is insisted that the teacher by encouraging explanations, helpful counsels and interesting methods shall excite the pupil to attention and assiduity.

But there is a better way and a higher plane, and when conditions are favorable, an easier and a more permanent influence possible. The teacher may be and should be an inspiration more than and rather than a stimulus. I can best explain my meaning with a story.

Dr. J. O. Murray, when he left a New York City pastorate to assume the duties of Professor of English in Princeton University, was a man of superb character, delicious spirit and superior wisdom. For many years he had been a close student of men and letters, and fondly did he love both. Ere long the Princeton students measured him accurately. They needed not to be driven to his lectures. They looked forward with delight to the hours when he was to discourse upon the great English authors and read selections from their writings. He did not live among his books; in spirit he lived with the authors. He knew them; he loved them; he knew them so well, and knew young men so well he sought to lead his students to love whom and what he loved; and right well did he succeed.

One day he was lecturing to a College class of over one hundred men. He would step aside frequently from his manuscript and with charming, well-trained voice and captivating, fervid impersonation read selections from the author under discussion.

A baseball game of much importance was scheduled to begin at the end of the period. MacMann, the pitcher of the 'Varsity team; "Jimmy" Woods, the catcher, and "Big" Van Lennep, first baseman, were members of the class and were as interested as the others. The college bell on Old North rang for the close of the period and of the morning session. Dr. Murray closed his note-cover and with a profound bow, said, "I am not quite through, young gentlemen, but I understand that there is a baseball game"— He got no further, but was interrupted with, "Go on! Go on! The game can wait!" and such like outbursts from the students. One or two made a move to leave the room, but were greeted with, "Sit down, you fellows,"—and they sat down. With a smile of appreciation Dr. Murray resumed his lecture, and for fifteen minutes longer he poured out his eloquence, which was born of personal interest. At the close of the lecture, he again bowed to the class, and thanked the students for "their kindness," and with a storm of applause the boys filed out.

What was the result? For several days the College Library was besieged for the writings of Chaucer, for he was the author discussed that day by the beloved Murray. A love for good literature was that day born in the heart of the student.

That is what I mean. Into the inner life of his students this wise, cultured man breathed his spirit of love for letters. He imparted himself.

The teacher must know to impart knowledge. He must love with a consuming love to inspire his pupils to love whom and what he loves.

Items from the Bureau of Education

I. The Bulletins

DEPARTMENT OF THE INTERIOR

Bureau of Education—Washington

To the Editor.

My Dear Sir—The Bureau of Education is now issuing its bulletins on various phases of education at the rate of one number a week. Since the bulletin was begun, in 1906, one hundred and twenty numbers have been issued. It is no longer possible to mail all of these publications on one mailing list. It is our desire to get each of them into the hands of the people to whom they will be most valuable. Will you kindly assist us in doing this by publishing the inclosed list in your journal, and call attention to the fact that the Bureau of Education still has copies of many of these for free distribution and others may be had at a nominal sum from the Superintendent of Documents, Government Printing Office, Washington, D. C.?

Yours sincerely,

P. P. CLAXTON,

Commissioner.

[With the exceptions indicated, the documents named below will be sent free of charge upon application to the Commissioner of Education, Washington, D. C. Those marked with an asterisk (*) are no longer available for free distribution, but may be had of the Superintendent of Documents, Government Printing Office, Washington, D. C., upon payment of the price stated. Documents marked with a dagger (†) are out of print. Titles are abridged.]

1906

*No. 1.—Educational bill of 1906 for England and Wales. A. T. Smith. 10 cts.

†No. 2.—German views of American education. W. N. Hailmann.

- *No. 3.—State school systems: Oct. 1, 1904, to Oct. 1, 1906. E. C. Elliott. 15 cts.

1907

- *No. 1.—The continuation school in the United States. A. J. Jones. 15 cts.
†No. 2.—Agricultural education. James Ralph Jewell.
*No. 3.—Auxiliary schools of Germany. B. Maennel. 15 cts.
†No. 4.—The elimination of pupils from school. E. L. Thorndike.

1908

- *No. 1.—On training of persons to teach agriculture. L. H. Bailey. 10 cts.
†No. 2.—List of publications of the United States Bureau of Education, 1867-1907.
*No. 3.—Bibliography of education for 1907. P. I. Wyer, jr., and Martha L. Phelps. 10 cts.
*No. 4.—Music education in the United States. Arthur L. Manchester. 10 cts.
No. 5.—Education in Formosa. Julean H. Arnold, American consul at Tamsui.
*No. 6.—The apprenticeship system. Carroll D. Wright. 15 cts.
*No. 7.—State school systems: Oct. 1, 1906, to Oct. 1, 1908. E. C. Elliott. 30 cts.
No. 8.—Statistics of State universities, etc., 1907-8.

1909

- No. 1.—Facilities for study and research in Washington. Arthur T. Hadley.
No. 2.—Admission of Chinese students to American universities. John Fryer.
*No. 3.—Daily meals of school children. Caroline L. Hunt. 10 cts.
*No. 4.—The teaching staff of secondary schools. E. L. Thorndike. 10 cts.
No. 5.—Statistics of public, society, and school libraries in 1908.
*No. 6.—Instruction in the fine and manual arts. Henry T. Bailey. 15 cts.
No. 7.—Index to the Reports of the Commissioner of Education, 1867-1907.

*No. 8.—A teacher's professional library. Classified list of 100 titles. 5 cts.

No. 9.—Bibliography of education for 1908-9.

No. 10.—Education for efficiency in railroad service. J. Shirley Eaton.

*No. 11.—Statistics of State universities, etc., 1908-9. 5 cts.
1910.

No. 1.—Reform in teaching religion in Saxony. Arley Barthlow Show.

No. 2.—State school systems: Oct. 1, 1908, to Oct. 1, 1909. E. C. Elliott.

†No. 3.—List of publications of the United States Bureau of Education, 1867-1910.

No. 4.—The biological stations of Europe. Charles Atwood Kofoid.

No. 5.—American schoolhouses. Fletcher B. Dresslar.

*No. 6.—Statistics of State universities, etc., 1909-10. 5 cts.
1911

*No. 1.—Bibliography of science teaching. 5 cts.

No. 2.—Opportunities for graduate study in agriculture. A. C. Monahan.

*No. 3.—Agencies for improvement of teachers in service. William C. Ruediger. 15 cts.

*No. 4.—Report of the commission to study the public schools of Baltimore. 10 cts.

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No. 6.—Graduate work in mathematics in universities.

No. 7.—Undergraduate work in mathematics in colleges and universities.

No. 8.—Examinations in mathematics.

No. 9.—Mathematics in technological schools of collegiate grade.

*No. 10.—Bibliography of education for 1909-10. 15 cts.

*No. 11.—Bibliography of child study for the years 1908-9. 10 cts.

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- No. 18.—Teacher's certificates (laws and regulations). Harlan Updegraff.
- No. 19.—Statistics of State universities, etc., 1910-11.

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- *No. 1.—Course of study for rural-school teachers. F. Mutchler and W. J. Craig. 5 cts.
- No. 2.—Mathematics at West Point and Annapolis.
- No. 3.—Report of committee on uniform records and reports.
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- *No. 16.—The reorganized school playground. Henry S. Curtis. 5 cts.
- *No. 17.—The Montessori system of education. Anna Tolman Smith. 5 cts.
- *No. 18.—Teaching language through agriculture, etc. M. A. Leiper. 5 cts.
- *No. 19.—Professional distribution of college graduates. B. B. Burritt. 10 cts.

- *No. 20.—Readjustment of a rural high school. H. A. Brown.
10 cts.
- No. 21.—Urban and rural common-school statistics. H. Updegraff and W. R. Hood.
- No. 22.—Public and private high schools.
- *No. 23.—Special collections in libraries. W. D. Johnston and I. G. Mudge. 10 cts.
- No. 24.—Current educational topics, No. III.
- No. 25.—List of publications of the United States Bureau of Education, 1912.
- No. 26.—Bibliography of child study for the years of 1910-1911.
- No. 27.—History of public school education in Arkansas. Stephen B. Weeks.
- No. 28.—Cultivating school grounds in Wake County, N. C. Zebulon Judd.
- No. 29.—Bibliography of teaching of mathematics. D. E. Smith and C. Goldziher.
- No. 30.—Latin-American universities and special schools. Edgar Ewing Brandon.
- No. 31.—Educational directory, 1912.
- No. 32.—Bibliography of exceptional children and their education. A. MacDonald.
- No. 33.—Statistics of State universities, etc., 1912.

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- No. 1.—Monthly record of current educational publications, January, 1913.
- No. 2.—Training courses for rural teachers. A. C. Monahan and R. H. Wright.
- No. 3.—The teaching of modern languages in the United States. C. H. Handschin.
- No. 4.—Present standards of higher education. George Edwin MacLean.
- No. 5.—Monthly record of current educational publications, February, 1913.
- No. 6.—Agricultural instruction in high schools. C. H. Robinson and F. B. Jenks.
- No. 7.—College entrance requirements. Clarence D. Kingsley.
- No. 8.—The status of rural education. A. C. Monahan.
- No. 9.—Consular reports on continuation schools in Prussia.

- No. 10.—Monthly record of current educational publications, March, 1913.
- No. 11.—Monthly record of current educational publications, April, 1913.
- No. 12.—The promotion of peace. Fannie Fern Andrews.
- No. 13.—Standards for measuring efficiency of schools. G. D. Strayer.
- No. 14.—Agricultural instruction in secondary schools.
- No. 15.—Monthly record of current educational publications, May, 1913.
- No. 16.—Bibliography of medical inspection and health supervision.
- No. 17.—A trade school for girls.
- No. 18.—Congress on hygiene and demography. Fletcher B. Dresslar.
- No. 19.—German industrial education. Holmes Beckwith.
- No. 20.—Illiteracy in the United States.
- No. 21.—Monthly record of current educational publications, June, 1913.
- No. 22.—Bibliography of industrial, vocational, and trade education.
- No. 23.—The Georgia Club. E. C. Branson.
- No. 24.—Education in Germany and the United States. G. Kerschesteiner.
- No. 25.—Industrial education in Columbus, Ga. R. B. Daniel.
- No. 26.—Good roads arbor day. Susan B. Sipe.
- No. 27.—Prison schools. A. C. Hill.
- No. 28.—Expressions on education by American statesmen and publicists.
- No. 29.—Accredited secondary schools in the United States. K. C. Babcock.
- No. 30.—Education in the South.
- No. 31.—Special features in city school systems.
- No. 32.—Educational survey of Montgomery County, Md.
- No. 33.—Monthly record of current educational publications, September, 1913.
- No. 34.—Pension systems in Great Britain. R. W. Sies.
- No. 35.—A list of books suited to a high-school library.

II. Sex Education

To what extent can sex instruction be given in the public schools? Wide difference of opinion still exists among school men on the subject, judging from reports received at the United States Bureau of Education. There is widespread recognition of what President Foster, of Reed College, calls "The Social Emergency," and general agreement as to the need of action against the social evil, but when it comes to the question of what part the public school shall play, the ideas range from a detailed plan of sex instruction beginning in the elementary schools to a determined opposition to any form of sex education whatsoever.

Professor Thomas M. Balliet, of New York University, outlines several points of attack in sex education. He believes sex instruction can now be given to the following groups: (1) To parents, by means of lectures; (2) to enlisted men in the Army and Navy, where the need for it is urgent; (3) to college students, both men and women; (4) to young people in Y. M. C. A.'s and similar associations. Dr. Balliet considers sex instruction to college students particularly valuable; because it will enable them to impart sex knowledge in turn to pupils in elementary and secondary schools, as soon as the public is prepared for this step.

Recently medical men have joined hands with school men in the sex hygiene movement. Dr. Hugh Cabot, a distinguished physician of Boston, is one of the leaders in the demand for sex instruction in the schools. He declares that the policy of silence and punishment as practiced in the past has failed. He suggests education, rather than punishment, as a remedy for social evils. He says: "Sooner or later we shall come to realize that teaching the comprehension of the sex instinct is the function of the public school, though we are far from such a realization to-day." Other members of the American Federation of Sex Hygiene, including former President Eliot, of Harvard, who is the head of the organization, hold equally positive views of the need for sex instruction.

On the other hand, there are many, both among educators and physicians, who see danger in sex instruction in the schools. Dr. Tierney, president of Woodstock College, Maryland, ex-

presses the fear that is in the minds of many thinkers, when he says: "Sex instruction is apt to put forward by some years the time of suggestion and temptation. Safety lies in diverting the attention from sex details."

Officials of the Bureau of Education believe that the sex hygiene question is about to assume great importance in many school systems. Chicago is now struggling with the problem; the board of education has appropriated money to provide lectures on sex hygiene to parents and to groups of high-school pupils, with the ultimate idea of extending sex instruction to the elementary schools if the experiment with older pupils proves satisfactory. Teachers in New York and other cities report considerable success in incorporating sex instruction into elementary work in biology. State Superintendent Hyatt, of California, has issued a leaflet on sex instruction that has been considered worthy of distribution by the United States Government; while the American Federation of Sex Hygiene, carrying out its plan of constructive work against the social evil, has drawn up what is probably the most careful outline yet devised for sex education at every stage of life, both in school and at home.

III. Educational Positions—Philippine Islands

The last examination before appointments are made of those who will attend the 1914 session of the Vacation Assembly at Baguio, the Summer Capital of the Philippines, as a preparation for their work with the Bureau of Education, is announced by the United States Civil Service Commission for December 30-31, 1913, in various cities throughout the United States.

From the eligible list thus secured appointments will be made during the coming Spring for service in the Philippine Islands beginning with the opening of schools next school year.

The service requires:—

Women for—Home Economics.

Men for—Agriculture, Manual Training, High School Science, Mathematics, English, History and Supervisors of School Districts.

For information relative to the nature of the service and the examination, address Bureau of Insular Affairs, Washington, D. C.

Live-Wire Arguments

From

State Superintendents of Education

["A Comparative Study of Public School Systems in the Forty-eight States" was published in December, 1912, by the Russell Sage Foundation. The States were ranked educationally as they were believed to meet ten specified tests of efficiency. Believing that the Superintendents of Education in some of the States would be willing to express themselves in reference to the report, the editor invited them to do so for the benefit of the readers of Educational Foundations. The replies will be published from month to month. All of them contain interesting statements and the series will reflect the spirit of present day education in America in a manner hardly possible in any other way. No person sincerely interested in our educational progress can afford to miss these contributions. Our thanks are due and are publicly offered to these champions of the schools who thus favor us with their opinions.]

This Month

Lousiana—*T. H. Harris*

California—*Edward Hyatt*

Arkansas—*George B. Cook*

Louisiana

T. H. Harris, State Superintendent of Public Education for

the State of Louisiana, writes:

I have looked over the report of the Russell Sage Foundation to which you call attention, noting that the various States are compared with reference to their success along various educational lines.

I am free to admit that when Louisiana is given a number which is supposed to represent her relative standing as compared with the other States, that I had no conception of the value and the meaning of that number. For instance, if one State is given the number "1" and another the number "40," I do not know what either the "1" or the "40" stands for. I do know this, however, that while we possibly have not lived up to the highest ideals and have fallen short in many respects, yet we have been moving steadily forward. We have been voting school taxes and annually putting more money into the education of our children; we have been building good houses, consolidating country schools, organizing industrial departments for both boys and girls, establishing high schools, raising the standards of teachers, getting more children into the schools, lengthening the session, and improving the schools generally.

Just what number should be used to represent these efforts, I really do not know, but I do know that we are moving forward just about as fast as it is possible for us to move in a constructive way.

Thanking you for your letter, and with best wishes for the success of your splendid paper, I am,

Yours very truly,

A handwritten signature in dark ink, appearing to read "T. H. Harris". The signature is fluid and cursive, with a large initial "T" and a long, sweeping underline.

Why California Is Near the Top

By Edward Hyatt, Superintendent Public Instruction.

(California is No. 4 on the Russell Sage list.)

California is far from the center of population, but it is close to the top in the matter of educational excellence. We are proud of our rating. Many minor elements help in giving to our State this superiority, but the chief ones, in my estimation, are as follows:

First, the high plane upon which the California public schools exist may be found by looking back thirty years to the adoption of our State Constitution. John Swett was at that time the Superintendent of Public Instruction. He was a far seeing, wide minded statesman and law-giver, as well as a good school teacher. The legislators of that time were wise enough to give him a free hand in shaping the laws relating to the schools. He it was who put into the fundamental law of the land the things that other, older states have struggled for year in and year out, that some have attained and that others are fighting for to this day. Other States are urging a minimum wage for teachers, a minimum term of school, a minimum income for schools, a State school fund free from local pinching. California has had these things for thirty years, and has almost forgotten what great blessings they are. We owe much to the educational fathers of the State, who laid the foundations broad and strong.

Second, the high average of intelligence among our people. A great proportion of California's citizenship is of the class of intelligent immigrants. By this I mean people of education who have come and made their homes here on account of the congeniality of the country. Let it be understood that by "immigrant" is meant people from Kansas, Indiana, Georgia, New York, New England—our own people, and the best of our own people. Farmers, teachers, lawyers, men of every occupation, they are all immigrants or the sons and daughters of immigrants,

immigrants who possessed abundant energy and enterprise, else they never would have ventured beyond the mountains. It takes virility to break away and seek a home in a new country.

The proportion of illiterate immigration is small as compared with that of the Eastern States, where the crudest intelligence usually lodges before reaching the Mississippi and rarely ever gets beyond the barrier of the Rocky Mountains.

Next is our financial system. We have set aside vast bodies of land for the support of the public schools. From the sale of these lands large sums of money accumulate. When a community decides to build a school it sells bonds. We buy the bonds out of the fund obtained through the sale of school lands. The interest accruing on these bonds goes to swell our school fund, from which we take more money to buy more bonds to allow the building of more schools—an endless chain. It will be perceived that we are not embarrassed at any time by that commonest of paralyzing of school trouble, lack of money.

Again, California has no "backwoods" districts. We have school districts that are situated from fifty to a hundred miles from the nearest railroad station; but such a district has a teacher who is equal to those of the city schools and it is treated with exactly the same care that is bestowed upon the school most favored by circumstances and conditions.

And last: The climate helps. The pupil seldom is ill from colds and all the other indisposition due to the weather. This is no small thing, as will no doubt be attested by our eastern teacher friends. An outdoor life and a long growing season has the same effect upon humanity as it has upon animals or plants.

Edward Taylor

Arkansas

By State Superintendent George B. Cook.

It is my firm conviction that the carefully prepared pamphlet entitled "A Comparative Study of the Public School System in the Forty-eight States," recently issued by the Division of Education of the Russell Sage Foundation, and the wide publicity given to the same by the metropolitan press of the country, will result in incalculable good. This pamphlet is fairly and honestly prepared, and I believe in so far as the figures and the comments on the same will tell the story, it reveals the situation as it existed in 1910. This publication will at least stand for some years as an effectual stumbling block to the high-flown oratory of the demagogue who would harrangue the people in smug satisfaction by claiming excellence to which we are not justly entitled.

While Arkansas does belong in the classification of her educational statistics in the fourth division of States, as shown in the Sage Foundation report, this State is rapidly nearing the head of that division, as will be readily shown from the following brief comparison of the statistics for the year ending June 30, 1910, on which the comparisons were made, and for the year ending June 30, 1912. During this period the school population increased in round numbers 29,000, the enrollment 14,000, the average daily attendance nearly 7,000. While the length of the school term for the entire State was increased twelve days, making the average length of the school term for the State almost six months. In 1910, the value of the new school buildings erected amounted to nearly one-half million dollars; in 1911 to more than two-thirds of a million, and for 1912 to more than one million dollars. During the same biennial period more than three million dollars was added to the value of school district property, bringing that sum up to more than ten million dollars, and if the value of the State's educational institutions is to be included fully \$12,500,000, and the school revenues were increased from four and one-half millions to more than five and one-quarter millions of dollars.

It is also notable that the General Assembly of Arkansas of 1911 passed more comprehensive, progressive and remedial educational enactments than has ever been done probably by any previous legislature at any time in any State. These acts included establishment of a State Board of Education, State aid to high schools, consolidation of weak rural districts and the transportation of pupils, standardization of all educational institutions in the State, comprehensive law for the certification of teachers, a compulsory school attendance law, together with a number of minor acts.

The above shows conclusively the rapid strides Arkansas is making educationally, as well as along lines of material and industrial progress. The present school year is just half over, and there is every evidence that the statistical summary at the close of the year will show the same relative progress at the ever increasing ratio which has marked the past decade.

The fact still remains, however, that Arkansas, together with the other Southern States, has not yet arrived at the standard of public school development, toward which an aroused public sentiment is striving. Behind this condition there lie broad basic reasons that are sometimes overlooked. Without any disposition to arouse unpleasant memories, it is necessary at times frankly to state the material cost of the Civil War to the South. One brief set of figures taken from a pamphlet by Dr. Wicliffe Rose, entitled "School Funds in Ten Southern States," will prove this point as conclusively, I take it, as would a long argument. The per capita wealth of Arkansas in 1850 was \$190; in 1860 it was \$504, whereas, in 1870 it had dropped back to \$323, and in 1900 it was \$461; that is to say, the per capita wealth of Arkansas in 1900 was still \$60 less than in 1860; whereas, the gain from 1850 to 1860 had been \$314, or 165 per cent, a greater gain than was shown for any other Southern State for that period, and a greater gain than was shown during the same period for any one of the ten Northern States shown in Dr. Rose's pamphlet, with the exception of Illinois. Thus it will be seen that Arkansas was thrown backward in the procession more than fifty years. This is relatively true of all the States shown in the fourth division of the Sage Foundation report.

Again, the present public school system of Arkansas, which

has the unanimous support of our citizenship, has had its beginning and development with the lifetime of the present generation. In other words, its beginning dates from 1875, and has grown to its present impressive proportions in thirty-seven years, while in many of the older States the public school systems date the period of their uninterrupted growth from before the beginning of our National government.

It should be remembered also that the South is still confronted with the necessity of supporting a dual system of free schools, and it is only now that the negroes are beginning by taxes to support their portion of the school expenditures to any appreciable degree.

Closely related to the above statements is the fact that until within the last few years school development in Arkansas and the South has been retarded because of the great industrial reconstruction necessary to bring the agricultural and industrial products and values, on a new basis, to a standard that would make living and social conditions compatible with the ideals of our citizenship. If we assume that Arkansas had in 1900 recovered approximately to her condition of growth and development of fifty years before—and this is relatively true—then the following brief comparison of the school statistics in 1900 and 1912 will be pertinent.

	1900	1912
School population	484,689	603,226
Enrollment	314,662	409,746
Average daily attendance	195,401	261,474
Number of teachers employed.....	6,959	10,175
Average length of school term.....	77.4	117.9
Average annual salary of teachers	\$174	\$315
Amount raised for support of public schools	\$2,005,241	\$5,275,653
Money expended for maintenance of public schools	\$1,369,809	\$3,837,549
Value school property	\$2,616,535	\$10,131,828
Number of new school buildings.....	188	282
Value of new school buildings.....	\$57,385	\$1,014,109
Average value of new school buildings	\$305	\$3,596

Total amount expended for salaries

public school teachers\$1,208,805 \$3,205,125

The tables above submitted afford some idea as to the progress in affairs that can be estimated in figures. The progress made in physical attainments, intellectual advancement, social uplift, and moral and religious development, can only be determined by the change in manners, pursuits, culture and constructive tendencies, as shown in the life and character of the citizens.

The public school system of Arkansas needs no apology—not because any one of those who are working so earnestly for its advancement claim excellence, or feel that we have reached a place where we may rest from our long labors, but because there is in Arkansas an awakened public conscience that has made our public school development the vital, burning issue; because we have a citizenship that stands as a unit demanding the best and most practical training for life's happiness and for citizenship for all of our boys and girls; because, finally, this demand continues to make itself felt throughout the length and breadth of the State, and rings insistent within our legislative halls with the marked result that Arkansas is progressing educationally at as fast, if not faster, ratio than any other State in the Union, and, in proportion to her taxable values, is already as fully doing her share to support a complete free school system as are her sister States throughout the Union.

I may be permitted to say, in conclusion, that more than four years of active labor in the position I now hold justifies the feeling of optimism that possesses me. I fully realize that much remains to be done, and that none of even the present generation may live to see the fruition of my highest hope. Dull of sense and joined to his idol, however, must he be who cannot find much to cheer in conditions as they now obtain, who does not catch the spirit of the times and join with those who, while not unmindful of the evil existing, receive their inspiration from the good accomplished, who is only too glad to refrain from the thought of the lions in the way, and whose call is full of hope, whose look is full of cheer, and whose leadership will bring his followers to the heights of nobler achievement.

Geo. B. Book

Literary Snap-Shots

By Mary Eleanor Kramer.

Much interest is manifested in literary circles over the forthcoming biographical edition of James Whitcomb Riley's verse and prose. The work has been compiled by his nephew, Mr. Edmund H. Eitel, who for many years has been the poet's secretary. The work has been done under Mr. Riley's personal supervision, hence is absolutely authentic.

A sketch of the poet, for the most part in his own words, gives an intimate view of his life, and the many illustrations—reproductions of rare photographs of Mr. Riley, and many of his most celebrated manuscripts—add a distinct personal touch. The compilation will contain more than two hundred poems which have never before appeared in any book. The history of each poem is supplied, as well as much interesting and valuable information which serves to form the connecting link between the poet's literary career and his writings.

The first poem found, which disclosed the writer's ideas on poetry, is one entitled "The Ginoine Ar-Tickle," which was discovered in the files of the old Kokomo (Ind.) Tribune under date of Nov. 8, 1879.

Typically characteristic of Riley, it gives his views on poetry in a more readily understandable fashion than anything that might be said. It follows:

"Talkin' o' poetry—there's few men yit
'At's got the stuff biled down so's it'll pour
Out sorgum-like, and keeps a year or more
Jes' sweeter ever' time you tackle it!
W'y all the jinglin' truck 'at has been writ
For twenty 'ear and better is so pore
You can't find no sap in it any more
'n you'd find juice in puff balls! And I'd quit'.
What people wants is facts, I comprehend
And naked nature is the thing to give
You writin' basis, eh? And I contend
'At honest work is always bound to live.

Now them's my views! 'Cause you kin recommend
Sich poetry as that from end to end."

The work will come as a fitting commemoration of the beloved poet's sixty-second birthday, which he will celebrate on October 7."

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The late Francis Fisher Brown of Chicago, founder of the Dial, wrote an every-day life of Abraham Lincoln, whom he knew personally and greatly admired. A revised version of it was one of his last tasks as a man of letters.

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Dr. S. Weir Mitchell has written another long novel, "Westways," which is published by the Century Co. "Westways" is a country estate of middle Pennsylvania in the fifties and sixties; and the story deals with the life and people who call "Westways" home and with certain unusual phases of the Civil War.

* * * * *

One opens Scribner's Magazine with increasing interest these days. Perhaps the most distinguished contribution for the current month (October) is John Galsworthy's new novel, "The Dark Flower." It is to be concluded in the next number of the magazine, as is Mrs. Wharton's "The Custom of The Country." Ethel Rose has a delightful article on "Trout Fishing in Norway," which is interestingly illustrated. Colonel Roosevelt continues his series of life histories of African animals; his subject this month being the elephant.

* * * * *

The Chicago Public Library has instituted a new feature, said to be the first of its kind connected with any library. It is a study room for women. It is intended for the accommodation of women patrons of the library engaged in research, seeking assistance in the preparation of special subjects, papers, club programs and in all other forms of reference work. It is expected that the new room will develop into a center for the literary and study departments of the women's club as well as for teachers and professional women in search of literary material. The woman's room will be in charge of Mrs. Mary E. Rae, who, by long service with the library, together with much practical

experience in women's club work in many fields, is well fitted for this duty.

* * * * *

Among the many interesting features which comprise The Bookman for October, is the first of a new series of papers on "American Backgrounds for Fiction," the subject is "Georgia," and is written by Will N. Harben. One extract alone will illustrate the many good things in store for the reader. Says Mr. Harben: "Literary material is only literary material when a writer can get at it, and there is no veil to character so thick as conventionality. A poet or a prophet may be crushed out of existence by the mental mediocrity of his surroundings. Maeterlinck says somewhere that we go about with great thoughts and vast yearnings in our souls, seldom daring to open our hearts to our neighbors. I think this is especially true of town and city life. A man in an evening suit studying a wine list is not so likely to tell you all about his wife's infidelity as a hod-carrier in mud-stained overalls would be. So I think that I got nearer to the heart of humanity by knowing the crude, frank types in the mountains of Georgia than I could by daily intercourse with the most talkative denizens of any metropolis."

* * * * *

Out at Andrews Point, the extreme end of Cape Ann, Massachusetts, where a writer in the Congregationalist spent a happy vacation, there is a bronze tablet attached to a huge boulder bearing the words which Emerson wrote after having spent seven days at Pigeon Cove. The words as cited in the Congregationalist are as follows: "And behold the sea, the opaline plentiful and strong, yet beautiful as the rose or the rainbow, full of food, nourisher of men, purger of the world, creating a sweet climate, and in its interchangeable ebb and flow, and in its beauty at a few furlongs, giving a hint of that which changes not and is perfect."

* * * * *

The Heartening.

It may be that the words I spoke
To cheer him on his way,
To him were vain, but I myself
Was braver all that day.

—Winifred Webb in Poetry.

Says the Bookman of the Autobiography of S. S. McClure, now appearing in McClure's Magazine: "We have every reason to look forward to the Autobiography of S. S. McClure of which the first instalment is appearing in the October number of McClure's Magazine, with very unusual interest. We shall have substantial grounds for exasperation if it proves less interesting than it should be. The first instalment we have already read in advance proofs. It begins with the early life of Mr. McClure in Ireland and comes down to the time that the family emigrated to the United States and settled down in the Middle West. To say that the first part is not at all astonishing is in no sense hostile criticism. We counted on nothing else. Chapter One is the straightforward narrative of early years. A fine flavor of literary anecdote was not to be expected. That should come with the story of the years of achievement.

* * * * *

Books on South America seem without end as visitors from the United States increase in number. They come back with tales they must tell, statistics they must make public, and pictures they must make merchandise of. Those who have read with satisfaction the text of Ernest Peixotto's articles of the last year in Scribner's Magazine will find the text and the charming illustrations of the series now available in book form.

The great work of adventure and exploration, "Across Unknown South America," by A. Henry Savage Landor, has no rival in its field this autumn.

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Mr. Vilhjalmur Stefansson's "My Life with the Eskimo," just from the press, is said to be a fascinating record of description and adventure, and at the same time a contribution of importance to scientific literature.

* * * * *

Says the Christian Science Monitor: "News items to the effect that at a recent library sale, a copy of Whittier's "Moog Megone," was sold for \$50, recalls the poet's attempts to suppress this early work. The poem takes its name from a chieftain of the Saco Indians, and is legendary in character. It was first published in 1835 in the New England Magazine of that time, and the next year was brought out in book form by the Cornhill

publishers, Light & Stevens. This tiny 32mo., containing about 1,000 lines, was the first book published by Whittier. In 1857 he marked it for omission from the collection then being made of his poems, and wrote to Mr. Fields: "I think the poem has some degree of merit, but it is not in good taste, and the subject is by no means such as I would now choose."

The publisher, however, objected earnestly, and Whittier yielded with comic ruefulness. He was in the habit of speaking of it most disrespectfully, once saying that it was a "big Injun strutting about in Walter Scott's plaid."

* * * * *

Kate Douglas Wiggin's forthcoming novel, "The Story of Waitstill Baxter," has a Maine setting, in fact the scene is laid in the little village, so familiar to readers of "Rebecca." The book is heralded by her publishers, Houghton, Mifflin Co., as "a novel of American life strong in its Puritan severity."

* * * * *

The Century for October contains some illustrations of unusual interest. There is a sketch of Alphonse Daudet by John Alexander, a frontispiece by Edmund Dulac and a series of full-page plates from drawings of "New Made Americans," by W. T. Benda. Bernard Boutet de Monvel contributes some attractive posters by way of illustrations to an article on "Nemours: A Typical French Provincial Town," by Roger Boutet de Monvel.

Theodore Dresier continues his unique travel sketches, this time about Paris. Colonel Roosevelt, contributes the leading article under the title, "The Progressive Party." In fiction there is the first instalment of an anonymous novel entitled "Home," which bids fair to become of unusual interest.

* * * * *

The leading article for the month in "The Woman's Home Companion," is on "The New Freedom for Little Children," by Mary Heaton Vorse, a treatise on the "Montessori Method," as viewed and studied by Mrs. Vorse under the personal instruction of Dr. Montessori. On returning to America, accompanied by an American teacher trained in Dr. Montessori's school, Mrs. Vorse established a school near her summer home for her own daughter and the children of the neighborhood.

BOOK LIST

BOOK LIST.

American Heroes from History. By Inez N. McFee. Illustrated. 262 pages. Cloth, price 75 cents. A. Flanagan Company.

The Willard Work Book Manual For teachers of First, Second and Third Grades. By Agnes W. O'Brien. Paper. Price 5 cents.

Book One. For students of Fourth, Fifth and Sixth Grades. Cloth. Price 20 cents.

Book Two. For students of Seventh and Eighth Grades. Cloth. Price 20 cents. A. Flanagan Company, publisher.

Globes and Maps in Elementary Schools. A Teacher's Manual. By Leon O. Wiswell, School Libraries Inspector, New York State Education Department. Illustrated. Cloth, 64 pages. Rand McNally Company.

This Wonder-World. By Agnes Giberne. Illustrated, 211 pages. American Tract Society, publisher.

Anales de Instruccion Primaria. Montevideo, Uruguay.

The Newburgh Survey. Reports of Limited Investigations of Social Conditions in Newburgh, N. Y. By the Department of Surveys and Exhibits Russell Sage Foundation. Zenas L. Potter, Director Field Work.

Your Child Today and Tomorrow. By Sidonie Matzner Gruenberg, with a foreword by Bishop John H. Vincent, Chancellor of Chautauqua Institution. Illustrated, 234 pages. Price \$1.25 net. J. B. Lippincott, Publisher.

A Reading Book in Modern Philosophy. By G. E. Partridge, Ph.D., formerly lecturer in Clark University. Sturgis & Walton Company.

The Pupil's Arithmetic. Book five. By James C. Byrness, B.S., Ph.M., Member Board of Examiners, Department of Education, New York; Julia Richman, Late District Superintendent of Schools, New York, John S. Roberts, A.M., Ph.M., District Superintendent of Schools, New York. Price 10c. The Macmillan Company, Publishers.

American Literature. By William J. Long. Price \$1.35. This book aims to present an interesting and adequate record of American literature from the colonial to the present age, and to make the record in some degree worthy of the history and spirit of the American people. Ginn & Company, Publishers.

When Great Folks Were Little Folks. By Dorothy Donnell Calhoun. Illustrated. Price 40 cents. The Macmillan Company, Publishers.

Departmental Teaching Plan

Method of Assigning Teachers by Subjects Devised by
Superintendents of New York City.

Definite suggestions for the assignment of teachers of upper grades in schools under the departmental system—that of having to each only one or two subjects to a number of classes instead of all subjects to one class—have been worked out by a special committee of the board of superintendents consisting of Superintendents Straubenmuller and Edson. They include the following:

It is the opinion of your committee that if the conditions are favorable and the work well conducted, departmental instruction affords an opportunity for a more thorough preparation by teachers, added interest by pupils, a greater unity and completeness of work, a more effective supervision by the principal, and a better articulation of elementary work with high school work.

"1. All plans and schedules for departmental teaching should be based upon a careful study of the time schedule, in order that each subject may have its due portion of time, and the same should be submitted to the district superintendents.

"2. The chief consideration in determining the assignment of teachers to subjects should be preparation and fitness for the work.

"3. Attention should be given to a proper correlation of subjects, especially in the teaching of English.

"4. Each teacher should teach the subject assigned to her through the four grades wherever practicable.

"5. The official class teacher, designated as such, should, where possible, have charge of his (her) class for at least two periods per day. He (she) should keep a record of attendance and scholarship, should advise with pupils, and, under direction of the principal, should be held responsible for the character and amount of home work assigned to the pupils by the several teachers. As a rule not more than four teachers should give instruction to any class in any one day.

"6. Frequent conferences by teachers of the same subject, and by teachers of the same grade, should be held in order to direct the work wisely and to meet the objections and difficulties sure to arise in carrying out in the most effective way the plan of departmental teaching.

"7. A principal, in assigning teachers to duty, shall equalize the work of the teachers as far as possible."

These suggestions have been approved by the Board of Superintendents and transmitted to principals, and district superintendents. Their adoption was due primarily to the fact President Churchill, prior to his election, had studied the reports by superintendents and directors, made to Dr. Maxwell and had directed attention to certain criticisms and suggestions relative to departmental teaching made by Superintendent Edson. These were referred to the committee on elementary schools which called upon the Board of Superintendents to investigate them. It did so with the result now announced.

Lessons in Pedagogy

History and Principles of Education

By Charles H. Davis, B. S.

Classical Education—Greece and Rome.

(a) Athens.—Greek views of education have powerfully influenced the world, even down to modern times. The classics of Greece and Rome were until the middle of the nineteenth century the chief subjects of study in colleges and universities. This shows the influence of Greece in determining the subjects of study in modern schools.

Originality was a distinguishing trait of the Greeks. A spirit of humanity, in the broad sense, pervades their life. Plato says, "Education commences in the first years of childhood and lasts to the very end of life. Mother and nurse and father and tutor are quarrelling about the improvement of the child as soon as ever he is able to understand them; he cannot say or do anything without their setting forth to him that this is just and that is unjust; this is honorable and that is dishonorable; this holy and that is unholy; do this and abstain from that. And if he

obeys, well and good; if not, he is straightened by threats and blows like a piece of warped wood. At a later stage they send him to teachers, and enjoin them to see to his manners even more than to his reading and music; and the teachers do as they are desired."

Greek education was to humanize the man, was to train him to what was "good and beautiful."

Subjects of Instruction.—Reading, moral instruction, history, committing to memory and declamation, music and gymnastics constituted the main part of Greek education. In the higher education there was no study of foreign languages.

According to some authorities, music and gymnastics covered the whole Greek education.

Higher Education in Greece.—The three great philosophers of the period from the fifth to the third centuries B. C. were Socrates, one of the greatest teachers the world has ever seen, Plato and Aristotle. Study the Socratic method.

Plato (b. 430 B. C.) and the Academy. Some time after the martyrdom of Socrates by the Athenian people, his most illustrious disciple opened a school in a grove near Athens called the Academy. The name academy was soon transferred to the school, and from all parts of Greece ingenious youth came to be instructed in ethics, psychology, and philosophy. The Academy was the real beginning of university life in Europe, and is the most famous school of antiquity. Of Plato's methods of instruction little is known, but if the Dialogues of Plato are any indication of the methods used in the Academy, they must have been characterized by great skill and variety of resource in the adaptation to various kinds of minds. But of this we cannot be sure.

The Republic of Plato. In this work, the first great treatise on education, Plato sketches an ideal state and an ideal system of education. He attaches great importance to music and gymnastics. But the final object of physical training is mental and moral power. The higher education of the rulers of the state is to be in mathematics, geometry, astronomy, philosophy, and metaphysics. He would exclude all poetry which in any way teaches falsehood or license, the books that are placed in the hands of children are to be selected with the greatest care.

The future rulers of the State, the magistrates, are to be extendedly and laboriously trained for statesmanship. The physical sciences and the study of history are not mentioned.

Aristotle (b. 384 B. C.) and the Lyceum. Aristotle was for seventeen years the pupil of Plato; the latter was accustomed to speak of him as "The Mind of my School." On the farther side of Athens from the Academy was the Lyceum, a school surpassing all others in numbers and importance. Here Aristotle, after the death of Plato, taught. As he taught he walked about the covered walks of the school. Hence he was called the Peripatetic Philosopher, *peripatos* being a covered walk. Aristotle was probably the greatest mind of all antiquity. For twenty centuries his logical method ruled, with a despotism unparalleled, the minds of Europe. This great man was the creator and formulator of the science of Deductive Logic. His Rhetoric is also a great and famous work. His work on education is lost. But his other works contain many useful pedagogic remarks. He emphasizes the place of the family in education; thus sharply contrasting with Plato; feels the overmastering importance of moral education; he divides education into three parts—(1) bodily, (2) moral, (3) scientific or intellectual. He divides the subject of education into music and gymnastics; to these he adds drawing; he sees that mathematics have little moral influence.

Roman Education. The Roman civilization gave to the world no great ideas of education. The Roman mind was practical, not speculative; had no genius for philosophy nor for abstract theories of human perfection. Up to the end of the second century before Christ the Romans followed a system of military and moral education contrasting with Athenian education as Spartan with Athenian. After the conquest of Greece, Roman education began to take on a Grecian aspect, but with a strong tendency to the oratorical—the orator being held up as the ideal man. As music to the Greek, so was rhetoric to the Roman. The Roman may be said to have despised fine culture; what Rome desired to produce was, not specimens of cultured humanity, but Roman citizens. Up to 50 A. D. there were no public schools and no professors of teaching.

Quintilian (35-95 A. D.) Quintilian was the author of a

laborious work, of some 600 closely-printed pages, called *Institutes of Oratory*. It treats of the complete education and training of the orator, and discloses many features of the educational knowledge of his day. It is not a work of genius; it is often commonplace, but shows good sense and feeling.

Character of Quintilian's Educational Views. Many of the sentiments are admirable. "Has a son been born to you? From the first conceive the highest hopes of him." He does not believe in corporal punishment. He would have the first impressions of the child carefully guarded; therefore nurses and attendants should be irreproachable in conversation and character. The names of the letters should not be taught before their shapes. He recommends in the beginning the tracing of the copy; that the copies set should be moral precepts. The foregoing examples will show the practical character of Quintilian's educational views, which are chiefly set forth in the first two of the twelve books of the *Institutes*.

Seneca (d. 65 A. D.). A Roman philosopher of this name who lived in the first century, a contemporary of St. Paul of the New Testament, has some excellent educational maxims. "We study not for school, but for life," says he. On the importance of the thorough mastery of one book, he says, "I fear the man of one book." "By teaching, we ourselves learn"; "The end is attained sooner by example than by precept." These are favorable examples of Roman pedagogic thought.

Plutarch's (50-138 A. D.) *Lives of Illustrious Men*.—This book is an important one in the history of education. The author was born a Greek and wrote in that language, but he lived much in Rome, and in the latter part of the first century he opened a school there, lecturing on philosophy—for which the Romans had acquired a taste from the Greeks—literature and rhetoric. It is supposed that we have in the *lives* the substance of his instructions.

Educational Foundations Normal Reading and Study Course

Explanation

Suggestion

Read the statement of the United States Commissioner of Education:

"The total number of (Normal School) graduates, 18,278, was large enough to supply less than 25 per cent. of the demand for new teachers in the elementary schools of the country."

More than 75 per cent. of our teachers are compelled to take up the duties of their profession without professional training.

Not as a substitute for a normal school course, but as a help to those who aspire to better things, the following plan is offered:

1. Subscribe for and read carefully each month—Educational Foundations.

2. Buy or borrow as many of the books named in our Study Course as possible and begin to read them systematically; or,

3. Economize by organizing a Study Club and buy the necessary books from a common fund.

4. Begin at any time and finish when you can.

5. Set aside regularly for study a half hour, if possible, every day and two hours on holidays. When time is unavoidably lost, except from illness, try to make it up the next day.

6. Upon satisfactory evidence that the course has been completed, and after such examination as the editors may wish to conduct, a certificate will be given which it is believed will be of service in aiding the owner to secure a higher license and better position.

7. The editors will be glad to answer questions at any time or to render such help as may be required. Letters may be addressed to Charles H. Davis, Associate Editor. Write to us at least once a fortnight to tell us how you are progressing. Write as often as you wish.

8. No expense is to attach to this plan except the subscription price of Educational Foundations, the cost of the books purchased and a nominal charge for certificates, not to exceed 25c. If desired all books may be ordered through the publishers of Educational Foundations, 31-33 E. 27th St., N. Y. City.

List of Books for Reading and Study in the Educational Foundations Normal Course

Note.—The books starred are required, the other optional.

History and Principles of Education.

- *Monroe—Brief Course in the History of Education.
- Painter—History of Education.
- Quick's—Educational Reformers.
- Spencer—Education.
- Harris—Psychological Foundations.
- *Horne—Philosophy of Education.
- Butler—The Meaning of Education.
- *Bagley—The Educative Process.
- Colvin—The Learning Process.
- James—Psychology (Briefer Course).
- *James—Talks to Teachers.
- *Dewey—The School and Society.
- DeGarmo—Herbart and the Herbartians.
 - Report of the Committee of Ten.
 - Report of the Committee of Fifteen.
- Dexter and Garlich—Psychology in the Schoolroom.
- Yocum—Education, Culture and Democracy.
- Ruediger—Principles of Education.
- *Bolton—Principles of Education.
- Davidson—History of Education.
- Chancellor—A Theory of Motives, Ideals and Values, in Education.

Methods of Teaching.

- *Taylor—Principles and Methods of Teaching Reading.
- *Taylor—Composition in the Elementary School.
- *McMurry—The Method of the Recitation.
- *Walsh—Methods in Teaching Arithmetic.
 - McMurry—Special Method in Arithmetic.
- *Strayer—The Teaching Process.
 - Neumann—The Psychology of Learning.
 - Seeley—New School Management.
 - Hinsdale—The Art of Study.
 - Hamilton—The Recitation.

- Smith—The Teaching of Elementary Mathematics.
*DeGarmo—Essential of Method.
Chubb—The Teaching of English.
Carpenter, Baker and Scott—Teaching of English.
*Dexter and Garlick—A Primer of School Methods.
Redway—The Teaching of Geography.
Mace—The Teaching of History.
Jones—Teaching Children to Study (The Group System Applied).
*McMurry—How to Study and Teaching How to Study.

School Management.

- *Shaw—School Hygiene.
*Taylor—Class Management.
Perry—The Management of a City School.
*Chancellor—Teaching and Management.
Bagley—Class Room Management.

Prepare!

Success comes not by dreaming, drifting, hoping, complaining, rebelling, envying, pretending. Wheel the Artillery of your volitional and intellectual strenght into position. Put fire to powder and force to projectile. Determine Dare. Do. Devotion, heroism, ambition, enthusiasm these are the qualities that lead to promotion and achievement. Be not afraid of pluding, Read, Study, Think. This world no less than Heaven, is a prepared place for a prepared people.

Educational Foundations

VOL. XXV.

DECEMBER, 1913

No. 4

NOTES

Miss Grace C. Strachan, District Superintendent and president of the Interborough Association of Woman Teachers of New York City, well known throughout the country as an exponent of progressive policies and as a gifted leader in educational affairs is now a member of the Editorial Board of Educational Foundations. This simple announcement will be evidence sufficient of the increasing value of this magazine. It is not expected that our editorial sponsors should always agree on general questions of pedagogical or administrative importance but no dissenting whisper was heard in reference to the proposition that a woman should be added to the force and that the woman should be Miss Strachan. Her acquiescence is announced with pleasure and her influence, we trust, will in no wise be impaired by this affiliation.

One of the most significant documents ever published by the United States Bureau of Education is Bulletin 1913 No. 38. It is named "Report of the Committee of the National Council of Education on Economy of Time in Education."

The significance lies in the fact that here we have full evidence of the recognition of the faults of prevailing methods in education together with a demonstration of the sincere and thorough measures aimed at the correction of the faults. The better day in American Education draws on apace.

Dr. Maria Montessori is now in this country and is being advertised in New York as "The Greatest Woman Educator in the World's History."

Recent announcement has been made by the directors of the American Book Company of the death of their fellow director and secretary Mr. Gilman H. Tucker. The death occurred Friday November the fourteenth. Mr. Tucker's long years of efficient service make this event a lamentable one not only to the directors of the American Book Company but to the many friends and business acquaintances whose association with him even in a less intimate way gave them the opportunity to know his value to the publishing interests of the country.

Where the Teaching of Reading Fails

Alice Louise Harris,
Assistant Superintendent, Worcester, Mass.

So much has been said on the subject of reading that to some it may seem useless to say more.

Whether or not the last word has been said and written is debatable, but it is certainly true that the last words have not all been put into practice.

This is especially true of the period following the acquisition of the mechanics of reading—the period where the teaching of real reading begins, the intermediate and higher grades.

The work of the lowest grades, that of enabling the children to recognize words with ease and facility with an idea of their content is a most important one, the basis on which the superstructure of Reading stands. It is safe to say the superstructure is most often never built and pupils go through school with the idea that reading is mere word calling, a notion which does much in hindering them from gaining power in the true sense.

Reading is the open sesame to practically all knowledge. It is "thinking by means of the printed page, not the technical mastery of words."⁽¹⁾ Future school success depends largely upon the ability to read and interpret, and time spent on it is virtually training for every other lesson. These are **not** mere words, they embody a truth. After the mechanical difficulties are mastered, there is still needed definite training in ability—

- (1) To get the most out of the time spent in silent reading.
- (2) To get the substance of what is read.
- (3) In formation of literary tastes.

While there is much to be done in the training of vocal expression, there is even more to be done in the training of the silent reader, and this must necessarily be accomplished in grades above the most elementary.

Work in the Earliest Grades.

For easiest acquisition in the earliest grades there must be first of all a recognition of the child's mental and physiological

development rather than of the fact that he has arrived at "school age." There should be for the beginner, concentration on but one subject and that the one of Reading and Language. The confusion of many tongues is as nothing when compared to the oft-times multiplicity of demands made upon the child when he first enters school. One gapes in wonderment when the chaotic confusion of the beginning of that first year achieves a miraculous order at its close.

There must exist a less formal and more natural spirit of control in the first year and hence a more spontaneous development. Let us hope the number of schoolrooms is few where babes but recently out of arms must tiptoe to the class, and speak only when addressed. A prerequisite to the child's readily learning to read is absolute absence of fear, and freedom in spontaneous expression. The child who as he sits in his seat, is compelled to inhibit the natural impulse to articulate the words of the little story he is reading to himself, suffers not only an impediment to progress, but is placed under a condition directly opposed to that which not only his period of development, but his brain structure enforces.

As to Method.

Absolutely rigid adherence to any one method bespeaks a limited vision. We must provide for the eye minded, the ear minded, the motor minded, and be ready to use any method or device suited to the type of child, with due consideration of the mental process demanded of the learner.

The only way to teach any subject is that which shall adapt itself to the child's mode of assimilation and growth.

Since earliest times teachers have appreciated the difficulty in learning the force of a letter in isolation and have attempted in various ways to sugarcoat the process. Beginning as early as the sixteenth century, there were such devices as association of picture, its printed name and the letter most like the sound of the object or animal; e. g., **m**—the lowing cow, **r**—the moving post-wagon, or growling dog. In the same line, but later, was the association of the initial or final letter of a word with the word itself; e.g. **a** is for apple, or teach **b** with **tub**. Basedow (1774) rewarded the child who could put two letters together and make

a syllable, (a with b to make ab) with a bite of apple, smell of a flower, etc. "In his school bakery, sweet cakes and even bread was baked in the form of letters and the most doltish child soon learned to call for a large gingerbread **W** instead of the small i, and usually graduated from an alphabet diet of four weeks an accomplished a-b-c-darian." (2) There were varieties of devices by different ones for teaching different letters; such as twisting the body into the semblance of **w** and saying **woe**, or personating **f** with a helmet and necktie.

Before he goes to school the child has acquired a vocabulary through associations of words, bound together in the expression of an idea. Experience, backed by modern psychology and pedagogy, proves to us that a child can at first more easily learn to differentiate a word than a single letter. Because meaning always leads in a child's language acquisition, in the teaching of reading we should begin with such a unit as will express an idea. Since a word does not always function until placed with other words, the unit for establishing relations with content must then be the sentence-word, or the sentence presented as composed of individual words, but in such a way that the learner may early begin to handle the sentence as a vocal unity. He must early be made sentence-minded, and the beginning is the time for the teacher to begin training in the consideration that it is the sentence as a whole which is a thing of importance. Dealing with the word unrelated prevents progress in reading and there should be as rapid movement as possible to larger and still larger units. (3) (4)

In support of the foregoing, I take the privilege of inserting the following:

"When the child begins reading, he does not distinguish focally the elementary sounds in the words he hears and it is probable that the average child does not focalize the separate words of the sentence spoken in his presence. A sentence is to him simply a unified complex of sounds, that mean something as a whole." (4)

"Genetically, then, the growth of living speech both in the race and in the child has been from the protoplasm of total meanings expressed in sentences wholes, through a progressive analy-

sis to parts of speech and words, then to syllables and to elementary sounds." . . .

. . . "There is also an analogous development of the written and printed characters from primitive picture-wholes to characters representative of word-meanings, word-sounds, and finally to symbols for syllables and for elementary sounds." (5)

"As a rule, in the ordinary process of learning, the individual things with which we become acquainted are complex wholes; we recognize, identify, and remember them without completely analyzing them unless some practical necessity requires it. . . . In mastering any new situation or material, for example, in becoming familiar with a strange city, or in solving a geometry exercise, or in studying strange pictures to determine their artistic qualities, the following process takes place: The mind begins by apprehending the situation as a vague, unanalyzed whole; proceeds by comparison or selective attention to break this whole up into its parts (as far as necessary for the practical purpose of the moment); and then reconstructs (synthesizes) these parts into an organized whole in which the relation of the parts is more or less clearly perceived. Hence the natural method of learning involves an initial **analysis by the learner** (not by the teacher) followed by a synthesis by the learned; that is, it is analytic synthetic." (6)

"After the first general recognition of the fact that written letters may represent articulations, there is the process of fusion which combines letters into single words. The method of teaching words as single wholes has the largest possible justification in the fact that the child's articulations, which are factors of these early fusions, correspond to words as whole, rather than to single letters or parts of words. The most natural fusion is always the one for which the child's past experience has partly prepared him." (7)

Attention is also called to James, the greatest American psychologist, in his chapters on Discrimination and Association.

Phonics.

The difficulty of learning the isolated letter is easily understood. Undoubtedly children would discover for themselves, and they do, that each different letter has its definite function in rela-

tion to other letters; but progress is hastened and pitfalls bridged by definite and appropriate instruction in word analysis, as an aid to word mastery, as a means to independence.

Here again the largest possible elements are the ones to be emphasized and here again, as in the relation of the word to the sentence, should the relation of the phonetic element to the word **never be lost**. The phonic value of letters unrelated, if they have such a value when not in combination, is useless and emphasis should always be on its relation to the word as a whole, through word analysis. The child must first see the word as a whole and later be led to analyze it, to know the power of its parts and to be able to recognize them in other words. So soon as he is prepared for this, he should have abundant drill in phonograms or elements of words, always co-incident with the reading of the same in sentences. Rightly taught, there should be no need of the painful "blending stage" so common an experience in the past. The recognition of the elements of the printed word can be hastened, but it should be preceded by appropriate exercises for training the ear to distinguish elementary sounds and the vocal organs to produce these sounds.

Child Must Have Background of Experience.

In the process of teaching beginners to read, there is an important presupposition which should not be omitted and that is a background of oral experience. It is often necessary for the teacher to furnish the observation or experience which is to be made concrete through verbal portrayal; and if an idea is to be apprehended, opportunity must first be furnished for giving language power and clarifying the thinking. First telling the story which is later to be read follows a principle of the natural development of the child by giving him the words through the ear before presenting the symbol. Giving opportunity for expression through reproduction, drawing or painting, dramatization cultivates the imaging power and vitalizes the control.

As to Material.

A child learns quickly when the content of his reading is attractive. He loves a story, loves to get somewhere in what is said, has a persistency in continuing a line of thought or questioning. The material used as a basis for the instruction in read-

ing must fulfil the requirement of meeting a response in the child's instincts and capacities, and instead of consisting of isolated or unrelated sentences, it should answer the test of literature. The so-called accumulative tales furnish us with most appropriate material. These constructive stories possess first of all the test of time, having lived through generations. They stand the test of structure, having a beginning, a middle, and end; simple in plot, they have a main action with a steady movement toward a climax, a unity of purpose to the end, a definite conclusion. Every incident grows out of the preceding and necessitates the following. The characters are individual, full of purpose, and the stories are full of dramatic action. They are moral in their influence, leading the mind through a series of incidents to a just conclusion, the measure for measure morality most easily interpreted by the child's meagre experience of life. They have the necessary degree of suspense which makes the reader eager to proceed and furnishes the impetus and the momentum which spurs to effort and forms the motive for mastery. Because of their structure, they afford excellent means for organizing the imagination, developing language power, and training the mind. The subject matter is of such a character that attention from the first is centered on the thought,—and a right feeling is established toward reading. A need for the new word is felt and the manner of reading is hence affected.

In General.

Abundant opportunities should be given the children throughout the school hours for association with a book the character of whose contents will make the children eager to have it. The recitation period may then be spent by the teacher in showing the children how to be self-dependent from the very first, with constantly increasing power as he progresses. At this stage the recitation period is invariably a study period during which the children individually study aloud with the teacher. A common custom of insisting on a child's knowing every word in a sentence before reading aloud, in the past has led to dangerous places. Silent reading has a very important place when rightly used. The silent reading and obeying of the written blackboard direction, the reproduction of the thought of a sentence in the child's own words, after silent reading, afford valu-

able training. Care must be taken that they do not lapse into a mere vocal reproduction of a visual image of the symbol, rather than an expression of the content. But the child who puzzles too long silently over a word not only takes valuable time, but becomes mentally inactive, forgets what he is looking for, and loses the thread of the context. There is danger also of weakening the power we are trying to cultivate, that of visualizing the group instead of the single word.

Lifting the eyes from the page at specified intervals is another practice followed with the best intentions but which has a tendency to interfere with reading. A child's eyes are not co-ordinated to finer movements and the constant readjustment is not appropriate to his physiological development. It also focuses the mind on mechanics, destroys the thought and makes interrupted reading.

What McMurry calls "Incidental Reading" should accompany any book which may be used. This includes a vocabulary taught incidentally through association and repetition consisting of other words than those of a textbook. It would be included by such words as the names of the children, the words in the greetings of the day, directions for the general movements of the day, such as cut, draw, build, stand, sit, come, directions for playing games, names of characters in story told, in parts assigned for dramatization, in Mother Goose rhymes, etc., etc.

Intermediate and Advanced Grades.

After the initial year and a half or two years of school, the acquired ability to analyze words, and the interest which the children have in reading constitute the capital invested with the teachers of the intermediate and upper grades to be manipulated in such a manner as shall produce a constantly accumulating resource of mental and spiritual growth, power, and pleasure. As before stated, the real teaching of reading has been barely begun. The critical period is in the upper grades where the time allotted should never become a mere rote exercise.

"Can not get around the class" is a common argument against anything like intensive work. Reading should be **taught**, and not **heard**. Mere word repetition does not educate and the reading lesson should be something more than a rest period.

Phonics in Later Grades.

Speech habits are formed at an early day and phonetic drill has a deeper significance than merely being an aid to making out words. As traing for clear enunciation, as a means of discovering and corecting speech defects, of developing breath control, for attuning the ear to correct sounds, it is very important. The organs of speech need specific training to break up the habits of careless and slovenly speech, the habit of molding the words in the back part of the mouth or throat instead of by the lips. Such suggestions as "louder," "Speak Distinctly," "I do not understand," have little value and there should be daily, definite, interesting, spirited exercises, intelligently arranged and adapted for training the organs of modulation, the vocal chords, tongue, palate, teeth and lips. In the later grades then, the phonic analysis of words should not only be continued but there should be exercises for the express purpose of training in careful articulation, clear and distinct enunciation, correct pronunciation, proper breathing and general voice culture.

"Phonetic drill should awaken an ear conscience and no teacher should be permitted to victimize a whole roomful of children by pouring into their ears a volume of ugly tone. One of her requirements should be a good, clear, expressive speaking voice. Children are more sensitive and more easily reached through the ear than in any other way, and the secret of a teacher's influence is often the flexibility and beauty of her voice."(1)

Thinking Reading.

Real reading is thinking, and training in reading should aim to form the habit of **thinking** reading rather than of unthinking reading. To teach thinking reading is to vitalize the subject matter, giving it sound for the mental ear, color and motion for the mind's eye; arousing and directing the expression of thoughts, feelings, impulses. This requires of teachers the strength of high purpose and a realization of their meaning to the community. One cannot instill what he has not, nor lead in paths he does not know. Each teacher should have a plan with the fundamental principle that each day's work is a link in the child's educational chain.

Oral Reading.

A common conception of oral reading, judging from school practice, is that it is merely vocalization, an error which leads to the sacrifice of the development of a wide range of general reading, and of an acquaintance with a wide range of literature.

There are certain definite times when the recitation should be conducted on the study plan and pupils made to do vigorous thinking in unveiling the thought. This is intensive reading. Not every selection of the school reader is adapted to this kind of work, but for poetry and highly organized prose it is essential. One almost hesitates to emphasize any degree of this, fearing it may be misinterpreted as a mutilating process rather than a clarifying one. It is often a source of waste to take too much time questioning and explaining. If work is too intensive, it becomes monotonous and wearisome. It requires a teacher with such an appreciation of literary beauties as will make her desire to lead her class, a little at a time, to experience the pleasure which a masterpiece means to her. It requires discernment and sympathetic insight to determine whether a thing can be comprehended by a class, or whether it would be too difficult to make a clear and intelligible concept.

Impressions are what are needed, not tearing to tatters, not exhausting the emotional or intellectual significance; appreciative, unconventional reading, with sufficient discussion and explanation to give the impression and appreciation. Warning is made against too much turning to geographies, histories, dictionaries, etc., and making the recitation everything but a reading lesson.

"A closer study of the text itself to discover what the writer himself has said to interpret his meaning—this is the real ideal. One main duty of the teacher is to show his pupils that books are in the main self-explanatory. To look up in a book of reference the information that the author himself gives us, if we have eyes to see and brain to understand, is not to be a careful student, it is to be a careless and slovenly reader." (14) Assigning anticipated troubles forms a habit among the pupils of thinking these are the only ones, and so often prevents the scholarly habit of individual and voluntary activity. Interest the class then so that they will be anxious to work forward, to study the text, not for

difficult words, but for comprehension of theme and the means the author used for revealing it. Such difficulties as new words, familiar words in unfamiliar uses, idioms, complex sentence structure, should be dealt with after the encounter, in such a way as not to interfere with the spirit of the selection, nor to confuse the reader. The difficult word or phrase can be met by the substitution of a simple synonymous expression. The teacher must judge of relative importance, and discriminate between the incidental and that difficulty of which the pupil should be made conscious. To avoid obscuring a sense of perspective is necessary in the attempt to clarify certain challenging situations, peculiar customs, or unfamiliar institutions.

Relation of Language and Grammar.

The close relation between reading and language cannot be overlooked. Every reading lesson affects the child's speech and this should be recognized. Reading is one's source for a constantly increasing vocabulary, for gaining ability to recognize a word and its meaning, and learning to use it easily and correctly. Attention called to the especially felicitous phrase or choice of words cultivates a discriminating taste. The language period might often supplement the Reading period by appropriate drill in the recognition, meaning and utterance of familiar and unfamiliar words until the child is master of them.

The reading should gradually cultivate a sensitiveness to the relation of words to ideas; should give insight into the exact meanings of words that express relation (pronouns, conjunctions, prepositions) auxiliaries which aid in depicting modifications of mental attitude. The grammar class does not afford opportunities for the attention to words as to their meanings and uses, which have their place in the reading class as an aid to understanding the author.

Sentence analysis also enters here, where the complicated sentence structure obscures those words which are the real thought carriers. In the early grades children have an unconscious feeling and enjoyment of the artistic structure of a piece of literature. Full consciousness is dependent upon development through life and experience, but the awakening consciousness of the boy and girl in the upper grades should be directed to a

conception of language as a medium for embodying one's thought and feelings; of the power of stress, pitch, tone, inflection, etc., to portray these thoughts and feelings. He should be given some preliminary experience with artistic literary forms both prose and poetry as instruments of expression. These constitute the beginnings of a mastery which should lead to later comradeship through reading with literary artists greater and lesser.

Vocabulary and the Dictionary.

While the reading vocabulary chosen should not be without regard for the pupil's comprehension, it is possible to select so as to bring a wide command of words, enjoyment and understanding, even though not in words of one or two syllables.

The new and difficult word should first be met in its relation to other words, with frequent functioning in different but familiar situations, if it is to make an impression, and give power in facile reading and mental grasp. The context often gives the meaning of a hitherto unknown word. The dictionary strips a word of all the reinforcements which make it really apprehended, and is serviceable only when experience can make it intelligible. Get meanings then, through combinations of terms and situations found in the context, by means of question, illustration, substitution, rather than by dictionary definition alone. Dictionary definition should follow experience with the word in a variety of uses.

Silent Reading.

The most inclusive aim in reading is to get the thought. Most of the reading which the pupil will do throughout life is silent reading and he should be trained in school to do this to best advantage. A test of the teaching in the upper grades is the ability of the pupils to rapidly discover and hold clearly in mind the thought of the author. A portion of this training rests with the teachers who first introduce a textbook on a special subject (geography, history, arithmetic, etc.) and with those who continue to teach these subjects. But book mastery needs its consideration in the reading class. This work cannot be left to the history, geography, or language class alone; some of it can well be done in the reading class. Center attention

on the paragraph as a paragraph and as one of a group of paragraphs; on a group as a group and as part of a chapter; on the chapter as a chapter and as a part of the book as a whole.

In the beginning, the connection between the visual and auditory centers is so close that articulation is necessary to quick grasp, while a valuable aid in the earliest stages, this auditory-vocal process must be reduced to a minimum as the pupil progresses and lip-reading be substituted by eye-mind-ness for rapid reading and hence more complete grasp of thought. Primary children are taught to take in a sentence at a glance and give the idea to the class without looking at the group of words. Is it not possible to continue this training to the advantage of the student in power to read more rapidly, to look ahead quickly and get the thought of a paragraph? It is only since the close of the nineteenth century that the importance of instruction in silent reading has been considered of importance, and it demands special training which can be given only in upper grades. (10)(16)

Such exercises as the following might be used to advantage according to the advancement of the pupils.

- (a) A direction to be carried out, or a sentence to be reproduced after being exposed for a short time.
- (b) Open books at a signal, glance through a sentence or a paragraph, close at signal and reproduce orally.
- (c) Visualize a group of unrelated words.
- (d) Recitation following a single reading of a lesson.

Work of this character would make for concentration as well as for rapidity.

Mental Training and Mental Processes.

The teacher's mind must be on the process as well as on the result. In teaching reading, we are helping the pupil to learn reading and it is mind manipulation, not text manipulation, which is vitally important because the process affects the pupil's habit of mental procedure. So-called method often falls short in its application because the teacher lacks insight. Too often confusion ensues because the teacher through ignorance of the learner's mental process talks too much and the thinking becomes faulty. Teaching is creative, and sympathy and intuitive

insight are necessary in finding the way into the learner's mind. Helping to learn "is the vital touch of the teacher's mind with the mind in which the knowledge is born," it is the spiritual movement below the form. (17)

To read should be to think, each in his own way, the meaning that the page suggests. In so far as it can be presented, it should not be merely for the sake of reading, but for forming the habit of self-reliant thinking then is an aim of school training some particular connection. The feelings, impulses, thoughts aroused through reading should be given some opportunity for expression, for being put into action through the reader's judging, questioning, choosing, rejecting. Desultory reading results in mental disorganization. The teacher must direct the mental process until the mental exercise becomes a habit.

"Few people read in order to think. Quite frequently this reading results in a substantial inhibition of their own impulse in thinking, with danger of an eventual atrophy of the power to think in any true sense of the word. The development of the habit of self-reliant thinking then is an aim of school training justified by consideration not only of the child's responsibility as a social unit, but also of his personal culture." (18)

Vocal Expression.

It is commonly considered that one of our greatest failures is in teaching oral expression. Clear understanding, a background of images, is necessary for vocal expression. When we have trained the silent reader, have grappled with the printed page, and trained for clear understanding, we have trained for vocal expression, for to express thought one must first grasp it. To get expression one must work at the imagination, making it a matter of getting and giving pictures. A single word does not give a clear picture, it takes a group. We must get all the pictures in a sentence in order to read as we speak. We must form the habit of listening to the printed page as we would listen to a person speaking. This work cannot be done in a week or a month.

Emphasis to the pupil means only force. The teacher may lead him to see that pausing after a word, holding a word, modulating by inflection and circumflexion, as well as force, are

all ways of calling attention to a particular word, are ways of emphasizing. We should not expect pupils to represent emotions beyond their experience, and it is well to center lessons on one kind of emotion for a sufficient length of time to give experience in it and to make it understood.

Reading aloud to the children, without expected return, aids them in catching the infinitely varied rhythm of either prose or poetry. Imitation in this sense is economy of energy. The mind is peculiarly susceptible to tone and inflection and the meanings which would otherwise be beyond the grasp are often made understood by the assistance of the reader's voice, the listener thus getting both technique and thought.

Material.

Certain qualities are likely to appeal to certain ages; for example, rhymes and fairy tales in the primary; fables and myths in the intermediate; tales of chivalry in later grades, etc. But books cannot be apportioned according to age alone, another place where the judgment and tact of the teacher are needed.

Some teachers omit the poetry in the reading books. An interest in reading poetry is more difficult to arouse than in reading prose, but a class will listen to poetry with absorbed interest. Here again the taste is best cultivated by the teacher reading aloud fine poems to cultivate the taste and satisfy the sense of rhythm, and the first presentation of the selection in the reading book should usually be through its reading by the teacher.

For intensive work, the reading should be difficult, for extensive reading the matter should be easy. Between the two is that requiring a reasonable amount of effort. Extensive reading is just the opposite of intensive reading and should be given one-third to one-fourth the time. It is uninterrupted, free, for the form, rhythm, spirit of the author. With the adolescent period comes a craze for extensive reading, too much analysis having a deadening effect.

It is not enough to teach the technique of literary art, we must use the reading book to stimulate a desire for wider reading; it must serve as an open gateway for minds eager to avail themselves of literature which the book suggests. The practice

of using complete literary classics in the grades is one in conformity with a popular modern movement.

"Required reading" beyond a moderate degree is likely to take on the aspect of a task to the young reader, something he has to read being not nearly so attractive as something he has been led to think he wishes to read. To stimulate interest, frequent talks may be given about books. To whet the appetite, give the outline of a book, or read a part of a story and place where the pupil can get it to finish. A weekly period for talking over the books read by the pupils can create the good understanding between the teacher and pupil which is always a necessity.

Love for good books cannot begin too soon and it should never stop. The years preceding the High School should aid in forming the habit. Nothing assures interest like possession and if boys and girls can be made to want to own books much is accomplished.

Mechanical Accessories.

"Reading is a laboratory subject and the library is the reading laboratory." (5)

Pupils should be taught the mechanical features of a book. The first grade child can be taught to know his book by name, instead of as "the green book," or "the brown book."

In succeeding grades, the significance of the "title page" with its contents; the meaning of copyright preface, chapters, the Roman numerals which number them, index, table of contents, and the reasons for each should all be brought to the knowledge of the pupil. He should be given the beginnings at least in the use of a catalogue, in finding books and articles easily, in getting what he needs without waste of time and energy. He may be taught to use books of reference and to take notes in usable form.

"He must learn to do things with what is read, and to read so as to get things done." (5)

Mistakes in Teaching Reading.

1. It is a mistake to train listeners to look for such mistakes as miscalled or omitted words; better to train to note what was enjoyed, understood, read well, etc.

2. It is a mistake to mark each pupil in the obtrusive class-book as he reads, if he is expected to be interested in the content of what he is reading.

3. Concert reading, purely imitative reading, reading "around the class," reading with attention centered on punctuation, all work against good reading.

4. Such artificial standards as "lists of good readers," "going above," "reading to a mistake," are non-ethical and militate against the right spirit of reading.

5. Reading with the back to the class, or reading to the backs of the class, or standing beside the teacher, all confine the audience to one person—the teacher. The inspiration of the audience increases in proportion to its numbers. It should be the rule, not "occasionally," to have the reader stand out on the floor and face the class. He must be made to feel that he has a message for the class, that he is reading neither to himself nor for himself, but to his audience, which will be sympathetically influenced by a like attitude of attention. This is a factor of importance in good reading.

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The Value of Latin in the Schools

By Margaret F. Hill, Martinez, California

In this day when so much attention is given in the schools to practical and technical work, we find Latin, once the very bulwark of the student, being pushed into the background. We are beginning to consider it as only a dust-covered relic of past ages—a dead language of an extinct race—which can be of no practical value to any one, and of interest only to the archeologist. Yet there still remain upholders of the old faith, who believe that Latin is of practical value, and under proper guidance may be made of living interest to the child. To a certain degree, Latin may be regarded as our own mother tongue. This phase of the subject has been so convincingly treated in the introduction to Hale's Latin Grammar, that I have taken the liberty in this discussion of drawing freely upon that source.

Latin was for a thousand years the dominant language of the world. But for our present purpose it concerns us only that it was spoken in Italy, France, and Spain. However, no language stands still. It changes continually, in the words used, in their form, their meaning, their pronunciation, and in the way of putting them together to express ideas. For instance, we can see some differences between our Modern English and that of Shakespeare's time. Going further back, we find Chaucer difficult to understand; and we would not recognize at all the Early English of King Alfred's time. In the same way Latin changed and developed. But it developed differently in different places, becoming Italian in Italy, French in France, and Spanish in Spain. So we may consider Latin as Early Italian, Early French, or Early Spanish; or, vice versa, Italians, French and Spanish speak Modern Latin.

But in a lesser degree, English is also Modern Latin. We think of Anglo Saxon as our Mother Tongue. Yet two thirds of the English words in daily use are of Latin origin.

I quote an illustration from Hale:

The little boy who begs in the street, "Please give me a cent, Mister," is speaking just half Anglo Saxon English and

half Latin English. "Give," "me" and "a" are derived from Anglo-Saxon, and "please," "cent," and "Mister" from Latin.

Thus Anglo-Saxon is only half our Mother tongue. Latin is the other half. And our English of to-day is not only Modern Anglo Saxon, but also Modern Latin.

Viewed in this light, Latin is not a dead language, but a living, growing thing, and of special interest to us as being a part of our heritage.

The child feels this close connection from the very beginning of his study of Latin, when he finds that nineteen hundred years ago a rose went by no other name than Rosa, that a poet was even then a poeta, that victoria meant victory, respondere to respond, defendere to defend, and so on endlessly.

Words such as these are living links between us and our Roman predecessors, and, by the way, the Latin student will find an added interest in his history class, in tracing the paths by which they have come down to us.

In the same line are exercises in word-building—such as the word magnify, made up of the words "magnus" meaning "large," and facere "to make" and hence its meaning: "to make large." Such work is invariably interesting to the child, and by it he gains an insight into the very structure of the English language. Often he finds one Latin word the ancestor of a whole tribe of English descendants. Then, the words in which we express our finer distinctions of thought are mainly of Latin origin. So by tracing the English words to their original meaning the pupil learns to perceive shades of difference, to discriminate, and choose.

Again, there are many words which acquire an additional richness or suggestiveness when we learn their origin. The child knows that the English word "Orient" means the East, but there is an element of poetry added when he finds that it originally meant "The Rising Sun." So for our word "candid," he learns the definition "frank," but in Latin "candidus" means "white," or "shining." And surely it would often be suggestive to the teacher to remember that the word "educate" signifies "to draw out," instead of "to pour in," as we are too often tempted to think.

Opportunities for such exercises as these are numberless, and it can readily be seen that they are an invaluable aid to the child's use of English, by enlarging his vocabulary, by increasing his power of discrimination in the choice of words, and by imparting an added richness and suggestiveness to the language.

The grammatical training involved in the study of Latin is also a great help to English. Latin grammar rests upon the same basic principles as the English grammar which the child has been studying for years, and which he has just finished in the eighth grade. His Latin, then, directly in line with his previous work, furnishes an excellent review, and from an entirely new standpoint. Thus he gains a new insight into the principle of all grammar, and at the same time clinches his knowledge of English grammar. It is by no means unusual to hear an educated person say that he gained his first real grasp of English grammar from the study of Latin.

One of the strongest claims for Latin is that of Mental Discipline. It helps to develop accuracy, clearness, power of logical analysis, and above all, the stamina that comes from hard work.

The study of any highly inflected language must of necessity help to form habit of observation and accuracy. To be able to put into their right relations a series of Latin words, with their terminal differences of tense and case, often slight and easily overlooked, but so all-important in the structure and meaning of the sentence, demands no small amount of alertness, care, and skill. To apply the complicated system of rules, with their fine distinctions and variations, requires and develops a clear and logical mind.

And Latin requires the discipline of work. As one of our ninth grade pupils expressed it, "You may skim over some things, but you can't do it in Latin. When you get your Latin you feel as if you had done something." This is a very excellent feeling for a boy or girl to have. It strengthens the spine.

Besides these more or less technical advantages, Latin has a decided cultural value. In the first place the student is reading, in its original form, literature written nineteen hundred years ago. This fact alone gives him a certain historical perspective. And it is the part of the teacher to give this literature its proper

setting. The child should be led to see the great world of the ancients, teeming with a civilization, as intense, as many sided, and as complex as our own.

Whatever leads the child to see beyond himself, to open his mind to the realization of other times and other men, whose lives nevertheless, were just as real as ours; to recognize that the great fundamental elements of human nature were the same, centuries ago, as now is of real and lasting value. Culture should not be purely utilitarian. The best parts of life are not necessarily those which bring us a livelihood. We must cultivate the imagination, broaden the horizon, quicken the sympathies, in a word, enrich the soul of the child, by every means.

Through the eloquence of Cicero we can still discern the passionate, high-strung, hero-worshipping man, impetuous, weak, and vain, yet fired by a high minded and devoted patriotism.

Virgil still charms us by the story of Aeneas—as we follow the fate of beings most convincingly human and like ourselves. And who could resist the little touches of nature, such as that in the hunting scene, when Aeneas' little son, the boy Ascanius, outriding them all, disdains the goat or deer, and prays that a tawny lion or a foaming boar may come roaring across his path.

Under skillful guidance by the teacher, even Caesar can be made to emerge from the tangled mass of ablative absolutes, participles and gerundives in which he usually goes shrouded, and the child will catch some glimpse of the wonderful character of the man, and the story, all the more fascinating because it is history at first hand, of his conquest of a fierce and barbarous race—our own Teutonic ancestors, in their strongholds of swamp and forest, who fought with a passionate love of freedom and liberty which has not altogether gone out in their descendants.

Aside from their historical and human interest, the Latin classics are of great value from a literary point of view. The dignity and beauty of the Latin language and literature, impossible to reproduce in translations, is not lost on the High School pupil. He can feel it even though he can not express it. The very sound of Latin words lends strength to their effect. They seem a fitting vehicle of expression for the classic Roman, in his stately toga, among his majestic columns and arches. The

sonorous cadence of Cicero, with his stately, balanced sentences, his antitheses, and his climaxes, do not fail to make their impression. Few boys or girls are insensible to the beauty of Aeneid, with its graceful perfection of rythm, and its poetic charm of diction.

And herein lies another of the strong arguments for the study of Latin; That is, in the formation of style. Unconsciously the student absorbs and to some degree reproduces in his own writing the style of these classic models. The educated classes of England have for centuries been steeped in the study of Latin. And the stamina, dignity, and elegance of the style of the standard English authors bears witness of this fact. What else could have produced it, and what have we to equal it?

And now, last, but not least, a knowledge of Latin is the best possible foundation for the study of Modern languages.

But perhaps, in this age, supremely that of action, rather than of culture, young America may object that he has no time for graces and accomplishments; that it would not be of very great value to him, after all, to be able to speak French prettily, or read Dante, in the original.

Whatever may be our opinion of this view, we think that he may be answered on his own ground.

Fifty years ago the knowledge of foreign languages may have been simply an accomplishment. But fifty years hence it will be a necessity.

With our telephones and our wireless telegraphy annihilating distance, with our railroads, our steamships, and our airships breaking down the barriers of mountain and sea, and with our American energy planting its enterprises in every part of the globe, the time is not far distant when the business man, if he is to hold his own, must be able to talk with everyone, in every part of the world. In the business world there will be a growing demand for knowledge of German, French, Italian and Spanish.

In America our demand for Spanish will increase. Without our interests in the Philippines, and the Panama Canal drawing us into closer relations with our Spanish-American neighbors, this is bound to be so.

And it is the part of our public school education to keep pace with the needs of the people. If our business men are to need languages then sooner or later the study of languages will take an important place in our schools.

And for this Latin is the best possible foundation. It is helpful in the study of German, on account of the similarity of grammatical construction and for the study of French, Spanish, and Italian it is almost indispensable.

The study of Latin, then enlarges and enriches the English vocabulary, aids English grammar, disciplines the mind, gives historical perspective and literary culture, moulds the style, and facilitates the study of modern languages. It has done these things for our forefathers, and it will do these things, and more, for the children of to-day.

Appeal and Emotion in Fiction

By Henry Albert Phillips

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formerly Associate Editor of The Metropolitan Magazine.

The fact that a prospective reader scans the title or the opening lines of a story is a guarantee of attention. Attention is not sufficient, however; there must be participation. At the very outset, the reader must be something more than merely receptive; he must contribute a modicum of emotion and in so doing he becomes interested.

Fiction, however, in its bid for interest, is subject to the same laws that govern all inter-communication. It must contain laudable appeal that attracts the personal concern of the reader. His interest is inseparable from his interests.

People will stop in the street by the hundreds, always willing to lend their attention to what appears to be unusual and promises to interest them. The moment they are convinced that the incident holds no interest for them, they pass on and forget it.

Thus the writer of fiction finds himself confronted with rather extraordinary problem. He must write about something that will interest a multitude of people; strangers to him, young and old, men and women, rich and poor, cultured and uncultured, happy and discontented. He must tell them something that will awaken a quick emotional response. In other words, he must entertain the multitude. Only the artist can accomplish such a feat as this.

What chance has the writer to address entertainingly and successfully the collective mental range of the polyglot multitude? Even in educational work there must be a progressive grading, with individual limitations all along the line. But the artist is a dealer in emotions and employs mentality only as a means to an end. There is a certain universality of heart interest, wherein lies the secret of all Fine Art appeal.

Once the writer makes his story interesting and plausible, the reader will not ask scientific questions. The element of plausibility is one of the most potent devices of appeal.

Halevy in opening the story of "The Insurgent," makes the tale seem so much a fact that its very plausibility lures the reader into following the opening incident to its culmination: "Prisoner," said the president of the military tribunal, "have you anything to aid in your own defense?"

In fiction the mere interest of the reader from beginning to end is scarcely enough to warrant its production. There must be a stronger outpouring of emotion elicited. There must rise, at the will of the artist behind the pen, unrestrained sympathy or hearty indignation, and ultimate satisfaction.

A man cannot pass by a brother in distress; he is impatient to give a helping hand to bring a criminal either to retribution or to justice; he is curious to know how a cultured beggar lost his equilibrium; he will travel through a story to see and act of mercy; he will unconsciously lean a little closer to hear the tale of the man who was,—a few of the infinitesimal sympathy lures of the human heart. The writer who cannot only make these emotional experiences live, but also make the reader live them shall never cease to be in demand.

It is not necessary then for the reader to have had actual experiences such as those depicted in fiction, but rather, to know that he could have such an one, and to feel that a given experience might be his own. Effective fiction puts the reader in a potential mood.

There are frequent examples among children, where this mood clings to them long after the printed page is withdrawn, in effect that they become varitable robbers, desperadoes, Indian fighters and adventurers.

In the reader's unselfish appreciation of the poignant experiences of others, he comes gradually to recognize the best elements within himself. There is no human pleasure akin to following and applauding in others that gracious magnanimity which we are sure we would bestow under like conditions. Thus part of man's interest in artistic fiction lies in an association with his better self and an opportunity to become better acquainted with his unrevealed ideals.

There are four stages, as a rule, in the development of the reader's interest: The more or less commonplace human interest first arrests his attention. Compelling personal interest next wakens his curiosity. Then universal heart interest grips his emotions. Until, finally, plausible story interest holds him—mind, heart and soul—until the tale is told.

In "The Fall of the House of Usher," we find these four phases of interest, following one upon the other, in close succession "During the whole dull, dark and soundless day" arrests the attention, "With the first glimpse of the building, a sense of insufferable gloom pervaded my spirit," wakens the curiosity; "The writer spoke of acute bodily illness, of a mental disorder which oppressed him," grips the emotions; and "About the whole mansion and domain there hung an atmosphere which had no affinity with the air of heaven," holds mind, heart and soul till the tale is told.

Technique is largely responsible for holding the story interest for the reader after he has once pierced the heart of the story. It passes then into the classification of entertainment of an extraordinary kind. In the Short Story we find an ever-ascending scale of interest, and a compelling suspense to be maintained, that require both skillful and finished treatment, yet with never the slightest indication that there is any such thing being resorted to at all as treatment or technique.

There is always something that must be developed to a state of maturity or perfection, and ever a sense of leading up to something higher and ultimate, that keeps the reader absorbed. At length,—when—and not until—every promise has been fulfilled; attention has been justified, curiosity satisfied, emotions gratified,—an interesting, entertaining tale has been translated into an emotional experience.

To learn the psychology of a series of acts that make a Short Story, is equivalent to tracing its emotional development back to its source. There would be a hundred fold more sympathy and tolerance in this erring world if we but knew the intimate history of every crime. Many a man condemns another on the instant knowledge of his fault, and himself commits the same error later under the same provocative conditions.

The purpose of fiction should never be to make us sympathize with the criminal and condone his crime. But through a more perfect knowledge of emotions and motives the reader learns that tolerant truth which tempers all judgment with mercy.

A Short Story is the emotional history, or psychology, of the dramatic situation culminating in the climax of the story itself. Only such data as contributes to the given emotional history is needful or acceptable for the writer's purpose. There is no single action throughout the narration that is independent of the grand climax. In fact, so intensive is the Short Story, that there should seldom be an action that is not the result of emotion, or that does not arouse emotional response.

The writer is naturally desirous of producing an effect upon the reader that is a counterpart in strength and truth of his own vision and impression. In no phase of narration is he called upon to restrain himself more than under the pressure of his own emotions. The moment he becomes ultra-emotional the taint of sentimentality will begin to creep into his expression.

The fact that disgust, fear, horror and terror are the easiest elements with which to produce emotional effects, makes them technically the less artistic media. The young artist is often over-zealous and over-colors his pictures with lurid contrasts and degenerates fine emotion into melodramatic passion. Maturity teaches that simplicity is always most effective. Great deeds seldom happen amidst the blare of a trumpet; heroism flourishes most beautifully far from the applauding crowds. Nature stages her dramas and tragedies in a silent, majestic movement that overwhelms the multitude. In the molten flow of Vesuvius and the devastating tide of the flood there is a relentless softness of approach that heightens the emotional pitch of their victims to fear, terror and horror. It is the emotional effect, that the writer must make tremendous, reverberating, startling, even appalling through the dynamic deed that forms his climax.

There is a three-fold status of emotion to be considered in analyzing the work of a writer. We must consider the stress of emotion under which the story was written; we must weigh the psychology of the chief character and the emotional potentiality

accumulated through dextrous planning and the agency of technique; and, finally, we must judge from the emotional effect upon the reader.

The writer who does not feel each emotional stage of his story with all the poignancy of the actual experience can scarcely expect his readers to feel more deeply than himself. The artist does not merely see the pain, the joy, the love and the bereavement that gives his story life and realism—he feels them. He is writing a story of life—not the life that we see, for that is only action, but the story of life that we feel, and which develops into deeds.

What are characters but puppets in a story if they have no emotional significance? The smile, the tear, the gesture, the look, mean no more than fingers and toes if we do not know their genesis. In fact they mean less than the fingers and toes to the puppet-man, for they are needed to make a perfect puppet, whereas symbols of emotion would seem out of place.

As to the emotion of the reader, we expect that to be a counterpart of the original impression of the writer. Is the picture as moving and as beautiful as the vision, we ask, or is it only an echo of the writer's magnificent impression? Of one thing we may rest assured, the effect on the reader will never be more beautiful than the vision that enthralled the artist.

A story which is said to be filled with, or to contain, emotion, lacks artistic potentiality, completely if it fails to induce emotion. Emotional power, expression or effect cannot be judged at all by laws and standards of mentality. It is measured alone by its power of appeal to an individual heart and by the depth of an individual's soul. An illiterate imbecile can be made to weep over the same simple tale of a child's tragedy that makes a childless, crusty old professor gulp if the writer is sufficiently an artist to induce the glamor of illusion. Emotion is personal, yet universal; Art must find the touchstone of its universality.

Feeling is the common gift; sympathy is more rare, and is the chief requisite of the writer of fiction. He must possess that power, which is not inaptly expressed in the phrase, "getting under the skin." This implies the emotional sight, to which all flesh phenomena becomes a psychological record of what is going

on underneath it. Earth has not the power to build a wall or a barrier that can shut out human emotion; even the death of the most obscure raises an emotion of pity, awe or grief in the hearts of every man who gazes upon it, that will bear fruit in his life and tincture his own death vision.

As a man feels, so he is; and as he is, is how he should appear in fiction.

Some Problems Facing the Superintendents

Recently the United States Commissioner of Education requested school superintendents in cities from 2,500 to 30,000 population to compile a list of the more important and difficult questions with which they have to deal and on which they have most often wanted help.

Three hundred and ninety-three replies have been received, containing in all over 100 separate problems of more or less importance to superintendents of schools in the smaller cities. Most of these are necessarily of a purely routine character, but they are interesting as revealing the present attitude of school men toward current problems. The following is a list of questions most frequently asked:

1. How to prepare a salary schedule for teachers based on merit and efficiency rather than on mere length of service.
2. How to test the efficiency of teachers. What should be the standard?
3. How to deal with backward and retarded pupils.
4. How to obtain a satisfactory basis for promotion of pupils.
5. How best to relate the work of the school to the life of the community.
6. How to secure the enforcement of compulsory attendance laws.
7. How to secure competent janitors.
8. How to arouse interest among parents. (This question was asked in nearly all the letters.)
9. How to control mothers' associations
10. How to prevent individual school board members from interfering with teaching methods and discipline.
11. How to make and keep teachers progressive in scholarship and professional training. Many superintendents complain of older teachers who have taught for a number of years and appear to be unresponsive to new ideas.
12. How to secure supervision from ward principals. In many of the municipalities a number of small buildings are scattered over the city with from four to eight teachers. One superintendent writes: "These groups of teachers are not large enough to have a principal who shall be supervisor of instruction, devot-

ing all his attention to it. The compensation of a principal of a small building is not sufficient to obtain the proper talent for supervision."

13. How to have property assessed so that the tax rate will not need to be 10 or 15 mills on a dollar. Several superintendents say that in their cities the assessed valuation of business properties which have trebled in value is the same as it was years ago. This tends to keep down the assessed valuation of other properties; hence a high rate is necessary, which makes it appear to the tax payer that the schools are being conducted in an extravagant way, yet these same schools may be costing less per pupil than formerly or less than in a neighboring city with a much lower rate of taxation.

14. How to convince a school board that it is poor economy for a superintendent to be burdened with the duties of a clerk or a policeman. In many of the smaller cities there is but little supervision, as the time of the superintendent is given to teaching, making out reports, etc. One superintendent expresses the general complaint of lack of clerical assistance by saying: "How can I convince a school board that a \$2,000 superintendent should not be doing the work of a \$400 clerk?"

15. How to secure and retain competent teachers and how to prevent the election of incompetent "home teachers" who may be related to some member of the board or to some prominent citizen. Judging from the tone of the letters received, not many superintendents in cities of less than 10,000 population are consulted when teachers are elected.

"Boards are loath to give the superintendent a free hand in selecting teachers. They are prone to consider teaching positions as half perquisites for relatives—a daughter of an old friend or business associate. They also employ 'home teachers,' often irrespective of qualifications in preference to competent teachers who live in another city or state." A superintendent, writing on the same question, however, says: "I believe that in a majority of instances where nepotism prevails, where personal favoritism influences the board, where politicians name the teachers, the fault is with the superintendent rather than with the board. A tactful and fearless superintendent can secure the co-operation of his board if he will."

Concluding Article on the Russell Sage Foundation Report

**By H. C. Morrison, Superintendent of Education, Vermont
Comparative Study of Public School Systems**

In general, the study prepared by the Russell Sage Foundation of the school systems of forty-eight states seems to me to have been well worth the while and on the whole it probably conveys a fairly accurate picture of comparative conditions in the several states. The material is assembled in graphic form, in brief compass, and presented in such a manner as to make it intelligible to the average citizen. In this respect, it is perhaps one of the best, if indeed not the very best, instance of educational reporting which we have had. It ought to be productive of great good, and I have no doubt that it will be.

From the standpoint of the public school administrator, it is most unfortunate that it is not more accurate and that in its use of terms it is not more discriminating. The press seems quite generally to have drawn the conclusion that we have here a reasonably fair statement of the relative efficiency of the several state schools systems. Of course we have no such thing. It does give a fair picture of conditions in the several states, but, except in a few instances, it gives no measure which can properly be termed a measure of efficiency.

In the first place, the statistics in some cases at least are inaccurate. Probably nobody in particular is to be censured for this, for the simple reason that we have not developed as yet anything like an accurate system of school statistics. We have no common term meaning the same thing in the different states. The source of our statistical information is in many cases notoriously unreliable, and this unreliability is enhanced when statistics are gathered in part from the returns of the state education offices, in part from the returns of city superintendents, and in part from the census. If the report assists in stimulating the

desire for reliable statistics and in making it somewhat easier for the United States Commissioner to carry forward his campaign for better statistics, it will have been worth the while on this count alone.

Of the "ten tests of efficiency" given, but five of them can reasonably be said to enter at all as factors into the question of efficiency of the public school system.

The number of children in school, the number of school days per child, the length of the school year, the attendance of children, and the relative proportion in the high school, may reasonably be said to be measures of the extent to which school systems are fundamentally succeeding.

Such items as expense per child, expenditure in proportion to wealth, daily cost, and salaries, are no doubt extremely interesting as revealing certain phases of educational conditions in the several states. But, it is a strange use of language to call them measures of efficiency.

No doubt it often happens that the daily cost per pupil is not so high as it ought to be for the purpose of producing good results. But, on the other hand, it is certainly very frequently true that it is much higher than it ought to be in proportion to the results produced. It is a strange inversion of terms to rate high unit cost as a measure of efficiency.

School people will doubtless applaud those states which have the highest rate of salary for the teaching force. But, it by no means necessarily follows that teaching is for that reason alone more efficient, or that the public school system is for that reason alone more efficient as a whole. It is a matter of common knowledge that there are many thousands of teachers who are doing a very high grade of work, often times with great devotion and personal self-sacrifice on very low salaries, and it is also a matter of common knowledge that many teachers are doing a relatively inefficient grade of work on salaries which are much larger than teachers commonly receive.

It is extremely important that the public school systems of a country, both state and local, should be carried on on precisely the same general bases as any healthy business undertaking is carried on. We need greatly to secure expressions for educational achievement. But these must be in terms of the

child and his progress through school. The measure of the efficiency of a school system will then be a fraction, of which educational achievement is the numerator and cost the denominator. Then and only then can we fairly say that we have a measure of the efficiency of public school systems, and I venture to add that then and only then will adequate funds begin to pour into the school treasuries.

To sum up, the Sage Foundation report seems to the writer to be a very valuable and useful document in so far as it exhibits a picture of the school conditions in the several states.

So far as it attempts to measure the efficiency of the several school systems, it is almost entirely a failure, and of course could not have been anything else.

Human Behavior

A First Book in Psychology for Teachers. By Stephen Sheldon Colvin and William Chandler Bagley. The Macmillan Co., New York. 1913. pp. VII+336. \$1.00.

This book tends to formulate psychological principles in terms of conduct or behavior. It consists of three parts. Part I discusses general principles of behavior; Part II, mechanical modes of behavior; Part III, consciously controlled modes of behavior. Psychology is defined as the science of consciousness. The book is chiefly concerned with the value of consciousness in our lives. The function of consciousness consists primarily in directing our movements and controlling our behavior. "The problem of psychology is not simply the analysis and description of consciousness and of the laws that govern it, but also an inquiry into the relation of consciousness to behavior and the interpretation of consciousness from the standpoint of behavior."

The appearance of consciousness and the significance of learning are discussed. The modification of behavior from its most simple form to all higher forms of intellectual life are described from point of view of trial and error, imitation and free ideas. Under "unlearned behavior" are pointed out the value of instinctive imitation, play, and curiosity as an aid in learning.

Attention is considered both from the subjective side and as an aspect of behavior. "All complicated modes of behavior are conditioned in their effectiveness by sustained and well-organized attention."

The affective aspect of consciousness is that which gives value or worth to an experience. "The most helpful point of view from which to regard the emotions is from the standpoint of the behavior accompanying emotional expression." Emotion is defined as a complex state of consciousness of high affective coloring, involving an intellectual and a will attitude; appearing under sudden stress in a rapidly developing situation, either actually present or ideally represented, to which situation adequate adjustment is temporarily blocked; and accompanied by bodily

sensations of considerable intensity. The practical significance of the affective life must be sought in something that results as a consequence of the emotional expression. The most important service that the emotions render in bringing into existence useful forms of behavior is by making possible new modes of behavior and train of ideas, resulting in new activities of a higher order. From the standpoint of school instruction one of the most important problems that arise in connection with education concerns the value that should be attached to the affective life. It is only when facts appear valuable to the individual that they lead to action. In addition to the knowledge imparted there should be awakened a genuine feeling that may lead to desired action.

Under the mechanical modes of behavior are discussed: The Nervous System as the Organ of Behavior, Reflex and Instinctive Behavior, The Value of the Human Instincts, Habitual Behavior, and the Law of Habit-Building. Behavior that is not directed by consciousness is to be understood as being entirely controlled by the nervous system and as the direct result of activities going on within this system. Some of the most essential facts in the structure and activities of the nervous system from the lowest forms of animal life up to man are considered briefly. The nature of the various types of behavior directed entirely by nervous activity are discussed in detail. The instincts are grouped with reference to the function that they fulfill into six classes, namely, adaptive, individualistic, sex and parental, religious, social and aesthetic. Under each class the more important specific instincts are listed. Following the name of each specific instinctive tendency is a statement (1) of its characteristic expressions, (2) of the feelings that either precede or accompany its normal expression, and (3) of the emotions that are commonly aroused when the normal instinctive expression is for any reason "blocked" or prevented. The value of the human instincts is discussed under the following questions: (1) of what service are these primitive tendencies to behavior? what instincts must education try to confirm and sanction? and (2) how shall education go about to change the instinctive tendencies that are not valuable in their primitive form? The value of the formation of useful habits is stressed. The law of habit-formation

is stated under three heads (1) focalization of consciousness upon the combination of movements to be made automatic; (2) attentive repetition of this behavior; (3) permitting no exceptions to occur until the habit has been established. The importance of initiative or "motivation" in habit-formation, the phenomenon of interference in habit-formation, the "practice curve" and its "plateaus," the significance of plateaus in habit-formation, the treatment of habit on the "plateau" stage, the importance of intense effort, the "transfer" of habits are pointed out. Pupils should be given a mastery of the method of habit-formation?

Under consciously controlled modes of behavior the following topics are discussed: Sensation and Behavior, Perception and Behavior, Imagination and Behavior, Memory and Behavior, Association and Behavior, Economy in Learning, and Behavior and the Higher Thought Processes.

Consciousness is of value to the individual only in so far as it influences conduct.

This book has been written with a distinct recognition of the immaturity and inexperience of the beginning teacher. The topics selected are those most closely related to the work of teaching. These have been treated concretely, enforcing each principle with a wealth of illustration, and the terminology has been simplified as much as possible without sacrificing accuracy of statement. Questions and exercises are appended to each chapter for the purpose of encouraging the student to study behavior in the concrete, and especially to observe the factors that operate in determining his own conduct.

For the beginning teacher this book has a very practical value.

LAURA EMILY MAU

Literary Snap-Shots

By Mary Eleanor Kramer.

Among the newer books of verse, Herbert Kaufman's "Poems" stand out as striking and powerful in quality. Some of the individual poems exhibit a fine emotionalism. Many of the bits of verse are sketches of pitiful, desolate women. Take for instance, "Why Are You Weeping, Sister?"

Why are you weeping, sister?
Why are you sitting alone?
I am bent and gray
And I've lost my way.
All my to-morrows were yesterday.
I traded them off for a wanton's pay.
I bartered my graces for silks and laces,
My heart I sold for a pot of gold—
Now I'm old.

* * * * *

Is there no mercy, sister?
For a wanton whose course is spent?
When a woman is lovely the world will fawn.
But not when her beauty and grace are gone,
When her face is seamed and her limbs are drawn.
I've had my day and I've had my play.
In my winter of loneliness I must pay—
Now I am old.

Again we quote from "The Kingdom of If":
There's a wonderful country, the kingdom of If,
And it lies in the Valley of Dreams.
'Neath the bluest of skies where the sun never dies,
It has gold for its oceans and streams.
There's never a storm and there's never a cloud,
And there's never a grief nor a woe,
And there's never a heart that in sorrow is bowed,
By the banks where the golden streams flow.
(Poems, by Herbert Kaufman, George H. Doran Co.)

If you are searching for a charming little book for a Christmas remembrance, you will be delighted with Josephine Preston Peabody's, "The Singing Man." This can but please the most discriminating taste. Have you read, "Rich Man, Poor Man," included in this collection?

Rich Man, Poor Man, Beggar Man, Thief,
Doctor, Lawyer, Merchant, Chief.'

* * * * *

Highway, stretched along the sun,
Highway, thronged 'till day is done;
Where the drifting Face replaces
Wave on wave on wave of faces.
And you count them one by one;
Rich man—Poor man—Beggar man—Thief;
Doctor—Lawyer—Merchant—Chief.'
Is it soothsay, is it fun?

* * * * *

What's your secret grim refrain,
Back and forth and back again,
Once, and now, and always so?
Three days since, and who was Thief?
Three days more, and who'll be Chief?
Oh, is that beyond belief,
Doctor—Lawyer—Merchant—Chief?

(From "The Singing Man," by Josephine Preston Peabody.
Houghton, Mifflin Co.)

* * * * *

Everyone knows the peculiar flavor of Christmas time, when snow crunches underfoot and logs blaze bright at dusk and Mother comes home with arms full of strange bundles and cheeks deliciously cold for kisses. Everyone knows the Christmas spirit, but only now and then does it creep into a story. Grace S. Richmond has done it before, and now she does it again, in "Under the Christmas Stars." The story tells how a little child, born under the Christmas stars, reunited a divided family.—("Under the Christmas Stars," by Grace S. Richmond, Doubleday, Page & Co.)

"The Life of Florence Nightingale" will be published very shortly by Messrs. Macmillan. It is from the pen of Sir E. T. Cook, who has had access to family papers, and so has been enabled to give for the first time a full account of this remarkable woman. The biography will be found to possess a special significance as correcting and supplementing what its author describes as "a popular legend," though only in the direction of enhancing the greatness of a noble life. It will consist of two volumes and will be furnished with interesting portraits and other illustrations.

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Mr. Gilbert K. Chesterson is preparing a volume on Charles Kingsley for the "English Men of Letters" series.

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The November "Bookman" contains an article from the pen of Margaret C. Anderson, entitled "A Child's Garden of Verse" (installment 1), which will prove of interest and help to teachers. It is a summary of the best books for children, under the sub-divisions: "School Stories for Boys," "Boy's Adventure in the Outdoors," "Welfare and History for Boys," "Stories for Girls," "For Both Boys and Girls," "Fairy Tales, Legends, and Classics" "Animal Stories," "Handy Books for Boys," and finally, "Verse, Jingles and Pictures."

Other features of special interest in this number of the "Bookman" are "Literary Zurich," by Amelia von Ende; "American Backgrounds for Fiction—The Pennsylvania Dutch," by Helen R. Martin, and "Chicago in Fiction," by Floyd Dell.

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Mr. Frank V. Irish announces a new edition of his popular "American and British Authors." Perhaps no book on literature of recent years has been so helpful to teachers and educators in general as has this. It has received well merited words of praise from grade teachers, college professors, school superintendents, etc. The purpose of the work is to stimulate the pupil

and lead him on to make studies of his own,—which is the real object in all perfect teaching.—(*American and British Authors*, by Frank V. Irish, Columbus, Ohio.)

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The sixth of the "American Highways and Byways" series has just been issued under the title, "From St. Lawrence to Virginia." In this work Mr. Johnson has penetrated into the picturesque and historically attractive regions of Pennsylvania, New York, New Jersey, Delaware, Maryland and Virginia. He makes the acquaintance of men who knew John Brown, Stonewall Jackson and other interesting personages and quotes their yarns. Of special interest are reminiscences of the days when oil was discovered in Pennsylvania; also of that odd political-religious sect known as the Harmonites. The work is illustrated, and appended by travel notes and automobile routes.—(*From the St. Lawrence to Virginia*, by Clifton Johnson. The Macmillan Co.)

* * * * *

"The Poems and Ballads of Robert Louis Stevenson," in complete form, are now for the first time brought within the covers of a single volume, of good typography and comfortable dimensions. A photogravure portrait of the author is included by way of a frontispiece. Messrs. Scribner are the publishers.

* * * * *

All dwellers in the kindly land of "Dixie," all lovers of poetry, will rejoice in Jennie Thornly Clarke's "Songs of the South." Mrs. Clarke has collected all the finest lyrics of the Southern States, from the earliest examples down to the present day. In it will be found the best known work of Edgar Allen Poe, Paul Hayne, Albert Pike, Maurice Thompson and Sidney Lanier, to mention but a few of the better known names. Many of its verses have never appeared in magazines, and in periodicals which have only been preserved in private libraries. There is an introduction by Joel Chandler Harris.—("Songs of the South," by Jennie Thornly Clarke. Doubleday, Page & Co.)

* * * * *

The American Magazine for November contains an interesting article, "The Glory of Panama," by Ray Stannard Baker. In the current issue of Good Housekeeping will be found a

helpful paper on "The Drama's Value for Children," by A. Minnie Herts Haniger, also a child-welfare article by Campbell MacCulloch, entitled "Who Picked Your Cranberries?" To the November National George Wharton James contributes another of his excellent literary papers, subject, "Robert Jones Burdette." Mrs. George F. Richards tells us of "The Wizards of Observatory Hill," Washington, while Evelyn Schuyler Scaeffler writes entertainingly of "A Novelist of To-morrow."

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In Scribner's for November Hudson Stuck, D.D., tells of "The Ascent of Denali (Mount McKinley), the article is profusely illustrated by original photographs by the author. The third of Theodore Roosevelt's life-stories of African animals appears, this number telling of the Rhinoceros and Hippopotamus; no well-informed teacher can afford to miss this series. Vernon Lee contributes "An English Writer's Notes on England," a beautifully illustrated travel article.

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"La Follette's Own Story." Senator Robert M. La Follette's autobiography is a frank and unreserved personal narrative of political experiences. The earlier chapters are particularly informing regarding the origins of the Progressive movement in the Middle West. This would not be a characteristic La Follette book if it did not strike out at those institutions and personalities whom the Senator regards as his foes. The volume is interesting to a marked degree, and illustrates the hard uphill climb of the politician who labors indefatigably for the right. —(A Personal Narrative of Political Experiences, by Robert M. LaFollette. The Robert M. La Follette Co., Madison Wis.)

1000 Pertinent Literary Queries

By Mary Eleanor Kramer.

(Book Rights Reserved.)

(Answers to these questions will be published next month. Teachers and students of literature are invited to send lists of answers. Acknowledgment will be made for the best list.)

(1—100)

1. What and where was the "Ugly Club?"
2. How was Paff's Wine Cellar related to American literature?
3. Who uttered of himself the gruesome prophecy, "I shall die as that tree, from the top down," meaning insanity?
4. Who was the "Sage of Highgate?"
5. Where and what is the "Naulahka?"
6. For what was "Winslow House" noted?
7. What was "The Sign o' the Lanthorn?"
8. Who said, "Our deeds shall travel with us from afar?"
9. Who is the author of the following extract:
 "Kissed his master,
 And cried, "All hail!" when he meant all harm?"
9. What New England poet was a direct descendant of John Alden?
10. Who was known as the "Pointer-Poet?"
11. Who said, "I would have a woman as true as Death. At the first real lie which works from the heart outward, she should be tenderly chloroformed into a better world, where she can have an angel for a governess, and feed on strange fruits which shall make her all over again, even to her bones and marrow?"
12. Give the eight general divisions of poetry, with an example of each.
13. To whom did Washington Irving dedicate his famous "Sketch Book?"
14. Who said, "My life should be unique; it should be an alms, a battle, a conquest, a medicine"?
15. What and where was "Tarryawhile"?
16. Who wrote "Happy Dodd"?

17. For what was "Turk's Head Tavern" noted?
18. Who said, "Slow rises worth by poverty depressed"?
19. What poet was termed the "Marvelous Boy"?
20. For what was "Betty Flanagan's Hotel" noted?
21. Tell of the "Lotus Club."
22. Tell of the "Saturday Club."
23. Of whom was it said, "He talks about Nature as if she had been born and brought up in Concord"?
24. What and where was "Cedarcroft"?
25. Who wrote:

Not many friends my life has made;
Few have I loved, and few are they
Who in my hand their hearts have laid;
And these were women, I am gray,
But never have I been betrayed"?

26. For what was "Clovernook" noted?
27. Who wrote "Cato"?
28. Who founded "The Spectator"?
29. Who was called "The Wicked Wasp of Twickenham"?
30. Who was "Highland Mary"?
31. Who was "Annie Laurie"?
32. Where and what was "Dove Cottage"?
33. For what is Stoke Pogis Churchyard noted?
34. Who was the author of "Mr. Isaacs"?
35. What was the original village of Henry Ward Beecher's "Norwood"?
36. For what is the "Vale of Chester" noted?
37. Of whom was it said, "He has the love of wisdom and the wisdom of love"?
38. Who said, "I never dog-eared a book in my life, nor profanely scribbled upon the title pages, margin or fly-leaf, and would as soon have stuck a pin through my flesh as through the pages of a book"?
39. Who said, "Education is a better safeguard of liberty than a standing army"?
40. What popular novelist served as a hospital nurse in Washington, D. C., in 1862-63?

41. What noted scientist's grave in Mt. Auburn cemetery is marked by a boulder from the glacier of the Arr, and shaded by pine trees brought from Switzerland?

42. Who wrote "A Bow of Orange Ribbon"?

43. For what is "Riverby" famous?

44. Who was called "Sunset Cox," and why?

45. Who was the originator of "Dr. Lavendar"?

46. Who wrote the "Croaker papers"?

47. Who resided at "Copse Hill"?

48. Who wrote "Romona"?

49. Who wrote "Romola"?

50. Who called himself "The Incurable Spouting Yankee"?

51. For what is Trinity churchyard famed?

52. For what is "Sleepy Hollow Cemetery" famous?

53. Who wrote the "Deserted Village"?

54. What and Where was "Edgewood"?

55. What was the "Dryad's Green"?

56. What and where was "Bonnie-Castle"?

57. Who said: "True happiness

Consists not in the multitude of friends,
But in the worth and choice"?

58. Who wrote "Friendship Village"?

59. Who wrote "Doctor Faustus"?

60. What famous author wrote his masterpiece in prison?

61. What work has been termed the "most remarkable piece of minute self-revelation known to historians"?

62. For what is "Craigie House" notable?

63. Locate "Beechwood House," and tell for what famed.

64. What and where was "Addison's Walk"?

65. Name the "Lake poets."

66. What and where was "Holland House"?

67. Who said,

"While yet a child, nor yet a fool to fame,
I lisped in numbers, for the numbers came"?

68. Who wrote, "The Life and Opinions of Tristram Shandy"?

69. Who wrote "The House of Mirth"?

70. Who and what was the "Dryad's Green"?
71. Who said, "Upon opening Wordsworth a thousand springs seemed to gush at once in my heart, and the face of Nature of a sudden to change into a sudden freshness of life"?
72. Who wrote "Old Ironsides" and why?
73. Who was termed "The Founder of American Poetry"?
74. Who wrote "The Guardian Angel"?
75. Who wrote "The Alhambra"?
76. Who wrote "Crossing the Bar"?
77. Who was called "Shakespeare's Daughter," because of her remarkable genius?
78. Who wrote "Pippa Passes"?
79. Who wrote the "Songs of Seven"?
80. Who said, "An acre in Middlesex is better than a principality in Utopia"?
81. Where is Gad's Hill, and for what famed?
82. Who was "George Eliot"?
83. Who was the "Fat Contributor"?
84. Who said, "The true university of these days is a collection of books"?
85. Who was called "The Apostle of Culture"?
86. Who wrote "The Lay of the Last Minstrel"?
87. Who wrote "The American Flag"?
88. What and where was "Rydal Mount"?
89. Who was the first poet to be buried in the famed "Poet's Corner" of Westminster Abbey?
90. For what is Stratford noted?
91. What was the "Tribe of Ben"?
92. Who said, "Virtue is like a rich stone, best plain set"?
93. Who wrote, "John Halifax, Gentleman"?
94. Who wrote "The Little Minister"?
95. Who was known as "Mad Jack"?
96. Name two English poets who married sisters.
97. Who was termed "The Genial Charles"?
98. Who wrote "The Confessions of an Opium Eater"?
99. Who wrote "The Bridge of Sighs"?
100. On whose gravestone is inscribed the following: "Here lies one whose name was writ in water"?

DECEMBER BOOK LIST

A Familiar French Tale by a Popular Author, Well Edited.

Halery's Un Mariage D'Amour. Edited by Otto Patzer, Assistant Professor of French, University of Washington. This is a delightful little love tale by the author of "L'Abbe Constantin." In sweetness and simplicity it is fully comparable to the other favorite. The French is so easy that it is particularly well adapted to beginners in high school or college classes; the vocabulary is extremely simple and there is almost a total lack of syntactical difficulties. The charm of the story is admirably fitted to sustain the interest. Price 25 cents. Ginn & Co., publishers.

An Arithmetic to Fit the New Era.

Rural Arithmetic. A course in arithmetic intended to start children to thinking and figuring on home and its improvement. By John E. Calfee, Professor of Mathematics Berea College Normal, Berea, Ky. Price 30 cents. Ginn & Co., publishers.

A Superior Selection of Hymns for School Use.

Fifty Standard Hymns. By Ralph L. Baldwin, Supervisor of Music in the Public Schools, Hartford, Conn., and E. W. Newton. Price 10 cents. Ginn & Co.

An Ably Prepared Book for the Instruction of Foreigners.

The Direct Method of Teaching English to Foreigners. By Isaac Price, A. M., New York Public (day and evening) Schools. Book I. 144 pages. Frank D. Beattys & Co.

Farm Life Made Attractive.

Elementary Agriculture. By William Lewis Nida, Ph.D., Superintendent of Schools, River Forest, Ill. Illustrated. 228 pages. A. Flanagan Co.

Three Books of High Pedagogical Value.

Principles of Character Making. By Arthur Holmes. Ph.D., Dean of Faculties, Pennsylvania State College; recently Assistant Professor of Psychology and Assistant Director of the Psychological Clinic, University of Pennsylvania. 336 pages. J. B. Lippincott Co.

Current Activities and Influences in Education. By J. P. Garber, Ph. D., Association Superintendent of the Public Schools of Philadelphia. 370 pages. J. B. Lippincott Co.

Lippincott's Fourth Reader. By Homer P. Lewis, Superintendent of Schools, Worcester, Mass., and Elizabeth Lewis. In two parts. Illustrated. 360 pages. J. B. Lippincott Co.

French Humor in Attractive Dress.

Beaumarchais's Le Barbier De Seville. Edited by Frederick Hay Osgood, Master in Modern Languages,

Milton Academy, Milton, Mass. With its carefully developed plot, lucid style, rapid movement, and delightful humor, "Le Barbier de Seville" easily arouses and sustains the interest of the student. It is one of the plays recommended by the Committee of Twelve for reading in the advanced course in French. Price 45 cents. Ginn & Co., publishers.

Another Book in an Epochal Series.

School Efficiency a Constructive Study. By Paul H. Hanus, Professor of Education, Harvard University. 128 pages. World Book Co.

"A Book That Will Go Far Towards Putting the Right Girl in the Right Place."

Vocations for Girls. By E. W. Weaver, director of Vocational Guidance and Industrial Education Bureau of the Buffalo Chamber of Commerce. 200 pages. Price 75 cents net. The A. S. Barnes Co., publishers.

Two Valuable Books by a Man Who Has Mastered His Subject.

Art in Short Story Narration. A searching analysis of the qualifications of fiction in general, and of the short story in particular with copious examples, making the work a practical treatise. By Henry Albert Phillips. 160 pages. The Stanhope-Dodge Publishing Co.

The Plot of the Short Story. By Henry Albert Phillips. 160 pages. The Stanhope-Dodge Publishing Co.

Joshua, The Warrior Prince of Israel. By John Heston Willey, is dedicated most appropriately to Sunday School Teachers. Many day school teachers are workers in Sunday School as well. To all such we heartily recommend the reading of this volume. It is of great value to all who seek a clear knowledge of the character and position of Israel's heroic leader. Price \$1.00 net. W. C. O'Donnell, Jr., Publisher, 31-33 East 27th Street, New York.

The Willard Word Book Series by Agnes W. O'Brien, published by A. Flanagan Co. As mentioned last month, is deserving of special attention. A "word book" may or may not be different from a spelling book, but we have here something more and something better than a speller. The lists presented in the Manual give evidence of the care and skill with which selections and eliminations were made with the result that the teacher using this book is spending time with the words that most need attention. First we find a Phonics Table in the using of which it would seem that no confusion or uncertainty could possibly arise. The method is simplicity itself and the application plain and adequate. Then come words suitable for First, Second and Third Grades, with short optional lists and words requiring special drill. The Manual closes with twelve homophones and a short list of words to be distinguished. Book I. is for grades four, five and six; book II., for grades seven and eight.

Lessons in Pedagogy

By Charles H. Davis, B. S.

Principal P. S. No. 25, Borough of Queens, N. Y. C.

Lesson IV.—Methods in Education

General Methods.

There are four general methods in use, viz., the inductive method, the deductive method, the analytic method, and the synthetic method. Besides these general methods there are several particular methods, the most important of which are the oral, the lecture, the text-book, the topical, and the Socratic.

(a) The inductive method is a process of reasoning which establishes a general rule, definition or principle based upon the knowledge of particular cases.

(b) The deductive method starts with a general rule, definition or principle and shows its respective application to particular cases.

Development lessons should combine both of these methods.

(c) The analytic method is one that proceeds from the wholes to parts. In grammar, begin with the sentence and proceed to parts of the sentence.

(d) The synthetic method is one that proceeds from the parts to wholes. In grammar, begin with words and work toward the building of the sentence.

Particular Methods:—

(c) Oral Method.—In this method the teacher is a substitute for the matter in the text-book. This method is particularly adapted to the work in primary grades. With older pupils, there is the danger of the teacher's talking too much. A good teacher can arouse interest and stimulate activity in this way.

(f) Lecture Method.—This method is useful in the higher grades, and is in general use in all colleges. It is especially useful when the matter is brought up for discussion and other

reproduction in succeeding recitations. The regular use of this method is not warranted by the receptive powers of pupils in the elementary schools.

(g) Text-book.—This method is one in general use, but is abused by accepting recitations from verbal memory alone, nevertheless text-books should be used. Teach the pupils how to study and what to study, and then combine the oral method with this one to obtain the best results.

(h) Topical Method.—This method is particularly adapted to such studies as history and geography. The advantages claimed for this method are independence, logical thinking and rational self-activity. It may be used so as to combine analysis and synthesis in mastering connected discourse.

(i) Socratic Method.—This is a method of teaching rather than telling. The pupil is led by a series of questions to admit his own error, and then another series of questions leads him to the truth. This is a development method and is illustrated in Xenophon's *Memorabilia* and in Plato's *Dialogues*.

Questions for Review and Discussion

1. Did the Greeks believe in physical training as an end in itself, or was the training in gymnastics a means to mental culture.

2. What is meant by the saying, "No one has since been found able to bend the bow of Socrates?"

3. What were the Greeks most concerned with, the disciplinary or the informational value of studies?

4. In what respects has Roman education influenced England and America?

5. Why is Plutarch's *Lives* one of the greatest books of all time?

6. Who is generally credited with first bringing out the inductive method of teaching?

7. Explain what is meant by that system.

8. What was the condition of woman in respect to education in (a) China, (b) India, (c) Egypt, (d) Rome?

9. Describe the educational work of the Jesuits.
10. Give two educational ideas advocated by Montaigne.
11. Give two recommendations included in the educational system of Martin Luther.
12. Describe the Philanthropin.
13. State the difference between the German real school and gymnasium.
14. What education did Locke propose (a) for the sons of gentlemen? (b) for the children of the poor?
15. Mention the characteristic features of each of the following: (a) Gargantua, (b) Emile, (c) The Scholemaster, (d) Institutes of Oratory.
16. Give a brief account of the life and educational work of Horace Mann.
17. (a) What was Humanism? (b) Where did it originate? (c) Was it Christian or Pagan in Character?
18. Name five of the most famous books on education ever written.
19. Make a statement showing how each of the following has been connected with public education: Gideon Hawley, Victor M. Rice, Henry Barnard, Edward A. Sheldon, William T. Harris.

Geography

From the New York City Course of Study.

Geography has been defined as "the study of the earth as the home of man." How his physical environment aids or hinders the development of man, and what man has done to **modify**, adapt and utilize his physical environment, constitute the subject matter of geography. The human feature—man's achievements in industry, commerce, and political organization—should predominate in the study. As Dr. Harris has stated the proposition, the pupil "must begin with the natural differences of climate and lands and waters and obstacles that separate peoples, and study the methods by which man strives to equalize or overcome these differences by industry and commerce, to unite all places and all people, and make it possible for each to share in the productions of all."

The objects of teaching geography may be classified as practical, intellectual, and ethical. The chief practical purposes are the following:

1. There are many geographical facts, such, for example, as the location and characteristics of important cities, mountain systems, and large rivers, which it is a disgrace and a misfortune not to know. Every public school child must be made to know such matters so thoroughly that he will never forget them.

2. Maps and plans are now constantly used in newspapers and in business. The child must, therefore, be made to understand their conventional symbols and to become expert in referring to them and interpreting them.

3. The child, as a member of a great manufacturing and commercial community, should be familiar with the resources and productions, raw and manufactured, of his own country, and of all countries with which we have dealings; he should know the chief markets, home and foreign, for our goods; he should learn the quickest, safest and cheapest trade routes; he should be able to form conceptions of the kind of goods which home and foreign customers require from New York. While it cannot be expected that a child's judgment on such matters will be highly trained, he should know how and where to find such information when he needs it. •

4. Our current literature, magazines and newspapers, assume an intimate knowledge of geography on the part of the reader. School training in the subject should, therefore, result in the ability to determine quickly, by the use of an atlas, gazetteer or other work of reference, the location and characteristics of places, the names of which are met with in reading or required in business. Special training along this line is required during the last three years of the course, under the heading, "Location of places associated with important current events."

The intellectual purposes are the following:

1. Geography may be made to train the observing powers. As far as possible everything taught should be illustrated from what the child may see in this city. This statement holds good not merely of the introductory lessons in home geography, but of the lessons throughout the course. Representatives of the

chief races of men, every conceivable product of man's skill and industry, every modern means of transportation and communication, may be observed in this city, while our parks and museums are full of objects of historic and contemporary interest. It is suggested that each pupil be furnished with a small blank book in which to record out of school the results of his observation.

2. It may be made to train the imagination. At every step the pupil is called upon to build up conceptions of objects unseen and places unvisited through images derived from things seen, from pictures and from verbal descriptions.

3. Rightly taught, geography trains the memory. The great vice, however, of geography instruction is the learning by rote of lists of names (rivers, cities, etc.), or the descriptive matter in the text-book. To avoid this barren and wasteful process, the facts of geography should be linked by natural associations. "What association so strong," asks Professor Laurie, "as the association of all our knowledge of a subject with the familiar objects of our daily lives, out of which we have made the teaching of geography spring? What association so strong as the organic connection which this mode of teaching establishes in the mind?" Names of places, whenever possible, should be associated with important historical events and with literary allusions.

4. Geography should also be made, particularly during the last three years of the course, to train the reasoning powers. When you ask a child to classify the natural features of a country, rivers, for example, according to some common property, as navigability, or the products of a country, as necessities and luxuries; and still more when you ask him to generalize after he has classified, as for instance to determine the status of a people after a classification of their products, you are training him to reason.

The ethical purposes of the teaching of geography are to lead to the moral lesson that all men must work and that each man should so work that his labor will benefit not only himself, but the whole community, and that what is true of individuals is equally true of nations. "There is probably," says Professor Laurie, "no one subject so prolific of matter for independent

thought and judgment on the affairs of life, and the destiny and duty of man. By means of it, too, we not merely furnish moral material, so to speak, but we extend the sympathies of the pupil, and lay the foundation of that sentiment of humanity which is the necessary counterpoise to narrow and parochial prejudices."

In order that these matters may be more fully understood, the pupils must also be led to consider the earth in relation to the sun, its form, its motions, and such resultant phenomena as the seasons, air and ocean currents, and rains.

Educational Foundations Normal Reading and Study Course

Explanation

Suggestion

Read the statement of the United States Commissioner of Education:

"The total number of (Normal School) graduates, 18,278, was large enough to supply less than 25 per cent. of the demand for new teachers in the elementary schools of the country."

More than 75 per cent. of our teachers are compelled to take up the duties of their profession without professional training.

Not as a substitute for a normal school course, but as a help to those who aspire to better things, the following plan is offered:

1. Subscribe for and read carefully each month—Educational Foundations.

2. Buy or borrow as many of the books named in our Study Course as possible and begin to read them systematically; or,

3. Economize by organizing a Study Club and buy the necessary books from a common fund.

4. Begin at any time and finish when you can.

5. Set aside regularly for study a half hour, if possible, every day and two hours on holidays. When time is unavoidably lost, except from illness, try to make it up the next day.

6. Upon satisfactory evidence that the course has been completed, and after such examination as the editors may wish to conduct, a certificate will be given which it is believed will be of service in aiding the owner to secure a higher license and better position.

7. The editors will be glad to answer questions at any time or to render such help as may be required. Letters may be addressed to Charles H. Davis, Associate Editor. Write to us at least once a fortnight to tell us how you are progressing. Write as often as you wish.

8. No expense is to attach to this plan except the subscription price of Educational Foundations, the cost of the books purchased and a nominal charge for certificates, not to exceed 25c. If desired all books may be ordered through the publishers of Educational Foundations, 31-33 E. 27th St., N. Y. City.

List of Books for Reading and Study in the Educational Foundations Normal Course

Note.—The books starred are required, the other optional.

History and Principles of Education.

- *Monroe—Brief Course in the History of Education.
- Painter—History of Education.
- Quick's—Educational Reformers.
- Spencer—Education.
- Harris—Psychological Foundations.
- *Horne—Philosophy of Education.
- Butler—The Meaning of Education.
- *Bagley—The Educative Process.
- Colvin—The Learning Process.
- James—Psychology (Briefer Course).
- *James—Talks to Teachers.
- *Dewey—The School and Society.
- DeGarmo—Herbart and the Herbartians.
 - Report of the Committee of Ten.
 - Report of the Committee of Fifteen.
- Dexter and Garlich—Psychology in the Schoolroom.
- Yocum—Education, Culture and Democracy.
- Ruediger—Principles of Education.
- *Bolton—Principles of Education.
- Davidson—History of Education.
- Chancellor—A Theory of Motives, Ideals and Values, in Education.

Methods of Teaching.

- *Taylor—Principles and Methods of Teaching Reading.
- *Taylor—Composition in the Elementary School.
- *McMurry—The Method of the Recitation.
- *Walsh—Methods in Teaching Arithmetic.
 - McMurry—Special Method in Arithmetic.
- *Strayer—The Teaching Process.
 - Neumann—The Psychology of Learning.
 - Seeley—New School Management.
 - Hinsdale—The Art of Study.
 - Hamilton—The Recitation.

- Smith—The Teaching of Elementary Mathematics.
 *DeGarmo—Essential of Method.
 Chubb—The Teaching of English.
 Carpenter, Baker and Scott—Teaching of English.
 *Dexter and Garlick—A Primer of School Methods.
 Redway—The Teaching of Geography.
 Mace—The Teaching of History.
 Jones—Teaching Children to Study (The Group System Applied).
 *McMurry—How to Study and Teaching How to Study.

School Management.

- *Shaw—School Hygiene.
 *Taylor—Class Management.
 Perry—The Management of a City School.
 *Chancellor—Teaching and Management.
 Bagley—Class Room Management.

George Washington's Advice

The first and great object with you at present is to acquire, by industry and application, such knowledge as your situation enables you to obtain as will be useful to you in life. In doing this, two other important objects will be gained besides the acquisition of knowledge—namely, a habit of industry and a disrelish of that profusion of money and dissipation of time which are ever dependent upon idleness.—*Letter to George Steptoe Washington. Mount Vernon, Mar. 23, 1789. Writings, XI, p. 370.*

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VOL. XXV.

JANUARY, 1914

No. 5

NOTES

Any one familiar with the map of the New England States knows that Vermont and New Hampshire are something like two right angle triangles of the same square. This will not be considered much of an excuse for the blunder occurring in last month's Educational Foundations when in connection with his keen analysis of the Russell Sage Foundation Report, Superintendent H. C. Morrison of New Hampshire was assigned to Vermont. As we have no other explanation to offer, we point to the geographical contiguity of these two States and hint at some subtle psychological influence originating in our hypothetical knowledge of the "lay of the land." Apologies are due to H. C. Morrison, State Superintendent of Public Instruction for the State of New Hampshire, and to Mason S. Stone, State Superintendent of Education for the State of Vermont, both of whom are entitled to supreme honors each in his own fair field.

The discussion of the Report is continued in this number by R. C. Stearns, Superintendent of Public Instruction in Virginia.

Recent Utterances of Leading Educators

In an address before the Institute of Arts and Sciences upon the subject "What is Practical Education," Dr. James E. Russell, dean of Teachers' College of Columbia University, expressed the following vigorous sentiment:

"The greatest peril of our education to-day is that it promises an open door to every boy and girl up to the age of 14, and then turns them ruthlessly into the world to find most doors not only closed but locked against them. Throughout this country we are telling thousands—yes, millions—of boys and girls that anything they please may be had for the asking, and during the six or eight

years of the school course they are instructed that nothing is beyond attainment.

"Then, too, our democratic notion of equality of opportunity is responsible for the attempt to hitch some very ordinary wagons to stars of the first magnitude. The result can only be bitter disappointment. Instead of a happy, contented, and able farmer, we make of the ambitious country boy a clerk or helper in some city industry or a cog in some factory wheel. Instead of helping the quick-witted city boy, who leaves school at 12 or 14 years of age, wise beyond his years, to employ his mental strength in shortening the term of apprenticeship in the grades and in improving the quality of the output, we turn him over to the tender mercies of the trades union or allow him to bungle ahead in his efforts to become a capable workman.

"What wonder that our skilled craftsmen are foreigners, and that our best American boys become petty politicians or walking delegates or seekers after the soft places. We do not teach them to do the day's work in such a way as to find pleasure and satisfaction in it. The result is grumbling and fault-finding and discontent in private life, and in civil life the beginnings of Socialism and anarchism. How can you expect a nation long to endure that bends every effort to rouse ambitions and stir aspirations in the breasts of all its citizens up to the age of 14 and then ruthlessly turns them out to shift for themselves? Is this the way to promote civil order and social stability? No other civilized State follows a plan so manifestly suicidal as ours. No other people, so far as I know, gives so much heed to the mental training of its citizens and leaves to chance those matters which are really essential in life.

"Think of what it means to our girls to enjoy for eight or ten years day dreams which the first contact with life shatters. Is it any wonder that the girl of 18 or 20 years, who had never had an hour's instruction in the scientific and aesthetic interpretation of those duties which confront her, should find non-pleasure in home-making. The situation is bad enough in the country, but is infinitely worse in our great cities. What chance has the girl of the tenements, even though she be well schooled and quick-witted?

"She leaves the school at 14 or 15 years to get her postgraduate training in housekeeping from her mother. Think of what that means. A home of two or three or four rooms in a crowded quarter, every member of the family at work or seeking it, living confined to the barest necessities, no conveniences for doing the ordinary work of a home even if that were necessary. What is left to the girl? The street—and it is nothing remarkable that some thoughtful persons should hold our public schools responsible for adding to the dangers of city life for bright and attractive girls. The surest way to break down family life and destroy the sanctity of the marriage tie is to mate an ignorant man with an ignorant woman—ignorant, I mean, of what marriage means and unfitted to meet its obligations."

"The child must grow in liberty if he is to grow well, and there is no other way in which his natural development can take place. The primal impulse of the child is to become a man, and it must have liberty to find those conditions, and that help which will enable him to become, in his fullest possibilities, the man he was destined to be."—Dr. Maria Montessori at Carnegie Hall, New York.

"It is time that the art of teaching received some consideration. The trouble is that we have too many young teachers who have received their degrees for writing treatises upon the comparative philology of the intransitive verb."—James F. Hosic, Chicago Teachers' College, at the National Council of Teachers of English.

[The following article bearing evidence of the patient research and able scholarship of the author is to be followed by others on the same general subject. The material is to be published later in book form, as it is known to be of permanent interest and value.—Ed.]

A Review of Representative Genetic Studies of Number

Henry D. Howell, Principal P. S. 27, Jersey City, N. J.

I. Primitive Men.

The origin and development of the number sense in primitive man has been studied in considerable detail by L. L. Conant* and W. J. McGee.† Of course, primitive men have long since turned to dust; so that the method of procedure must be to investigate the conditions in existing peoples who are still in varying stages of savage culture. The anthropological assumption is that the course of mental progress is approximately uniform and is by natural means so that the growth stage of a people may be determined by studying the mentality of other peoples developed to a corresponding stage.

It might be supposed that the development of the number-sense could only proceed *pari passu* with the development of number names, and that the limits of the latter would set the limitations of the former; or again that the convenience for counters of the ten fingers and ten toes would give rise very early in human history to decimal or vigesimal number systems. But a study of the beginnings of number systems shows that (1) "the origin of number names is at the bottom of the scale of human development, that is to say, comes late, (2) primeval man does not cognize quinary and decimal systems, (3) does not use his toes, fingers, etc., as mechanical adjuncts to nascent notation."‡

*L. L. Conant. *The Number Concept*. New York, 1886.

†W. J. McGee. *The Beginning of Mathematics*. *American Anthropologist*, I (new series), 1899, 646-674.

‡McGee, page 650.

Many primitive peoples count by fingers and hands, sometimes with the addition of toes and feet, and thereby fix quinary, decimal and vigesimal systems; but the burden of evidence is that these are far from primeval.

The paucity of number names among savage tribes is illustrated by the following examples cited by McGee. Some Australian tribes count laboriously up to 2, 3, 4, or 6, sometimes doubling 2 to make 4 or 3 to make 6 and in other ways revealing a quasi-binary system; certain Brazilian tribes are described as counting only to 2, 3, 4, usually with an additional name for many; the Tasmanians counted commonly to 2, sometimes to 4, and were able to reach 5 by the addition of one to the limited number (four and one more). But it should be noted that this paucity of number names did not set the limit to numerical capacity. Most tribesmen reveal the germ of notation in the use of sticks, notches, etc. By means of these and of gesture-language they symbolized numerical values beyond the limits of the number names. In the savage mind and (as we shall see) in the child's mind the series-idea as an abstraction precedes the naming. Modern names are the product of gradual evolution motivated by a felt necessity to express the series-idea already present. Our savage ancestors found it a tremendous task to reach a very meager number expression; that their conception of number far outran their ability to express is shown by much anthropological evidence, e. g., the original inhabitants of Victoria had no numerals above two, yet they counted and even recorded the phases of the moon.

The fundamental study of McGee bids us consider as fundamental to an understanding of the number systems of the earliest men that these men were beyond everything egoists and mystics with strange and (to us) mysterious ways of orientation. Binary, quaternary, and senary systems become to them subconsciously ternary, quinary and septenary, respectively. Quaternary does not remain purely quaternary, but by the addition of a vague unity (the ego, from which all things proceed) becomes quinary, the system of fours becomes in thought as well as in graphic representation a system of fives, sixes become sevens, and these by a process of augmentation form the bases of the larger numbers which belong to the respective systems.

An examination of some of the mechanical symbolisms will serve to make the method clear. The four-five system is represented by $\perp$ or $\cdot\cdot$. (Note that the point of intersection of the lines of the cross, or the middle dot represents the unity that is always counted in by the primeval man, himself, the It). This symbol is raised from $4+1$ to $8+1$ by adding a line or dot to each of the four cardinal extremities, thus ⋈ or ⋈ . "The mystical middle is persistent and can be counted but once howsoever the value be augmented." Again the $8+1$ is raised to $12+1$ by the addition of dots, thus ⋈ ; or still higher, ⋈ representing $20+1$, etc.; or by the development of the "meander," ⋈ representing $16+1$, etc. The augmentation may proceed thus indefinitely:

$$\text{Four-five system—} \quad \frac{4+1}{5} \quad \frac{8+1}{9} \quad \frac{12+1}{13} \quad \frac{16+1}{17} \quad \frac{20+1}{21} \quad \frac{24+1}{25} \\ \frac{28+1}{29} \quad \frac{32+1}{33} \quad \text{etc.}$$

The six-seven system is produced by the superposition of a binary system on the quaternary system. "It is more complicated and modified through the difficulty of depicting tri-dimensional relations on a bi-dimensional surface. Among the Pueblo people this is overcome by bisecting two of the quadrants, thus ⋈ but mechanical tendency operates to produce the regular figure* ⋈ ." From the first figure augmentation produces ⋈ representing $12+1$, which later is modified into the hexagon ⋈ ⋈ .

$$\text{Six-seven system—} \quad \frac{6+1}{7} \quad \frac{12+1}{13} \quad \frac{18+1}{19} \quad \frac{24+1}{25} \quad \frac{30+1}{31} \quad \frac{36+1}{37} \\ \frac{42+1}{43}$$

The binary-ternary system, from which the quatern-quinary system is derived by augmentation, is lacking in graphic representation. It was produced in a manner similar to the others.

$$\text{Two-three system—} \quad \frac{2+1}{3} \quad \frac{4+1}{5} \quad \frac{6+1}{7} \quad \frac{8+1}{9} \quad \frac{10+1}{11} \quad \frac{12+1}{13} \\ \frac{14+1}{15}$$

*McGee, page 662

It will be observed that some of the numbers occur in more than one system; these were deemed of unusual mystical significance. "These number systems are distinct from Aryan arithmetic, both in motive and mechanism. They are devices for divination, for binding the real world to the supernal and it is only later or in an ancillary way that they are prostituted to practical uses; yet by reason of the extraordinary potency imputed to them they dominate thought and action in the culture stages to which they belong and profoundly affect the course of intellectual development. The base of the system is a measure of the intellectual capacity normal to the culture stage to which it belongs."*

The investigation shows that the binary-ternary system is the earliest; higher in the scale of human development are the quatern-quinary and senary-septenary systems. It may seem strange that having hit upon a concept of five in the quatern-quinary that thenceforth the development of the convenient decimal system should not be rapid. But the definite quinary concept (from which the step to ten would have been easy) was missed by many primitive tribes although it was possessed by the ancestors of the Arabs with their decimal system, by the Mexicans who had a vigesimal systems, and a few others; and we find in many lands a distinct development of the senary-septenary system instead. Finger counting, then, is a comparatively late development, for if it had existed early, it would have led to the early rise of the decimal system. Direct observation of savage tribes in the earliest stages of culture confirm this absence of finger counting for many of them are found to be unable to count their fingers without the use of other symbols.

It would be of more anthropological than mathematical interest to trace the influence of the *almacabala* described above on the social and fiducial systems of primeval man and their relation to his ways of orientating himself. The dualistic (binary) conception of the cosmos existing among the earliest men (and further back among animals), the danger side in front, the safety side in the rear, merges into the antithesis of sea and land, the sea full of horrors, the land the haven of safety. Still later the strand of the shore stretching on either hand as the sea is faced

*McGee, page 660.

characterizes the quaternary stage of culture. More important from our point of view is the law of augmentation, which lies at the basis of the evolution of number systems and is the source of certain vestigial features still persisting in Aryan culture.

The three number systems described have all left vestiges, some of which persist even to modern times among civilized peoples. They may be traced to peoples still living in the lower culture stages thus serving to establish the course of the development of number concepts and to throw light upon the numeration of our savage ancestors. A few examples cited by McGee follow. The 6-7 system survives as the bridge connecting almacabala and mathematics. In the graphic form it became the Pythagorean hexagon of two superposed triangles, the hexagram of Brianchon (Parcelsus), the subrational hexogram of Pascal, etc. The astrologic seven retarded acceptance of the discovery of the eighth planet, Neptune. In the numerical form six, and more especially seven, play large roles in the classical and sacred literature revived during the Elizabethan period. Nine (from the 2-3 and 4-5 systems) survives in the Muses, nine lives of the cat, effeminacy of the tailor; it even survived in the school books of the early part of the century in the more curious than useful arithmetic process of casting out nines; thirteen, in all three systems, is still the messenger of evil in the minds of many; seventh son of a seventh son needs no training for medical craft, nor seventh daughter of seventh daughter as seeress.

It seems, then, that we have here the historical presentation of the beginnings of mathematics. The archaic method was "to use integral numbers as tokens of extra-natural potencies rather than as symbols for natural values; to combine them by a simple rule tending to develop into algorismic processes; and to represent the numerical combinations by mechanical devices tending to develop into geometrical forms; the system being characterized by the method of reckoning from an ill defined unity counted but once in each combination,"* "so that in all cases the exoterically mystical number carried an esoteric complement in the form of a simple unity reflecting the egoistic personality or subjectivity of the thinker."†

*McGee, page 664.

†McGee, page 656.

The quinary, decimal and vigesimal systems set forth by Conant, with their accompaniment of counting by fingers and hands, sometimes with toes and feet, mark later stages of culture and form transitional steps to our modern system. As mankind progressed counting was divorced from its supernal connections and became motivated more and more by practical ends of more precise adjustment to the environment. But for a long, long time man remained in the mere counting stage objectifying his series by objects and marks for the most part (number names being but a meagre possession); it is only when the savage becomes a thinking human being that number in the mathematical sense can be grasped by him. At this point "mere reckoning ceases and arithmetic begins."

To go back into our animal ancestry to search for earlier beginnings is interesting but futile. It is certain that the highest animals and the lowest savages have in common mathematical ability of a certain (or uncertain) sort which enables them to distinguish differences between small groups, and in some cases apparently to determine absolute number. The classical instance of the crow which could tell that one was absent from a group of not more than four men (simultaneous presentation); the nightingale which could tell when it had finished its meal of three worms given one at a time (successive presentation); the parent wasp which supplies its young with a food supply of five to twenty-four victims, no more, no less, according to its species; these are cases in point. Did these animals count or was their apprehension merely quantitative? Whatever the answer it applies equally well to the animal or the savage, since the objective product is the same in both. It would seem that we have here a capacity ultimate in its nature, with its roots lying far back in pre-human evolution, which because of its ultimate nature must, as Conant says, be left in the region of pure speculation.

A Great City School System

Prof. Scott Nearing, University of Pennsylvania,
Philadelphia, Pa.

If any two words in the English language can express the spirit of the Cincinnati schools, they are "co-operation" and "progressivism." The people of Cincinnati, high and low, have banded themselves together in an endeavor to make good schools. Cincinnati schools are not a monument to any individual, or group of individuals—rather they are the handiwork of the citizenship. In their eagerness for educational progress, the people are not hypnotized by every cry of "lo here, lo there!" nor do they live in terror of new educational ideas. Their one aim, the education of Cincinnati's children, takes precedence over every other consideration. Perhaps that fact explains both the co-operation and the progressivism.

Co-operation in the educational work of Cincinnati has been developed to a remarkable degree. "There is not a civic society in the whole town which is not working with the schools," says former Superintendent Dyer. Mr. Dyer might have left out the word "civic" and still have been very close to the truth.

Mr. Frederick A. Grier, a leader among the manufacturers who have made possible the "half time in shop, half time in school" system, says of his activity in co-operating with the school authorities: "As a citizen of Cincinnati, I am interested in the schools for two reasons. First, because good schools will bring under their influence the maximum number of pupils and parents, and it is the best agency I can conceive of for producing a high quality of citizenship. Second, as a manufacturer, I feel that the material prosperity of a community is directly related to the mental and manual equipment of its people." Showing his faith by his work. Mr. Geier has labored in season and out of season, to make the schools of Cincinnati the most progressive in the country.

Speaking as "a woman and mother," Mrs. Isabella C. Pendleton, of the Civic League, which has played an active part in building up school sentiment, says: "I consider that the most important features of our school system are the manual training for

boys and the domestic science for girls. I am happy to say that to-day a girl on graduating from our schools is capable of taking care of a home." As public schools go, that is not an insignificant achievement. No wonder Mrs. Pendleton, a woman and mother, is interested in schools which accomplish such vital results.

From what extraordinary sources do the schools in Cincinnati secure their support. "All of the local dentists have been brought into close contact with the School System by the efforts of the Dental Society to introduce mouth hygiene into the schools," says Dr. Sidney G. Rauh. "We dentists," adds Dr. Rauh, "are firm believers in general co-operation." No less cordial is the Board of Health in its endorsement of the schools, and in its efforts to raise the health standard of school children.

"I do not believe there is any city in the United States which offers as good an example of the spirit of co-operation as Cincinnati does," affirms Carl Dehoney, of the Chamber of Commerce. "Why are we so active in co-operating with the schools? Simply because we realize that good schools, and especially practical schools, which will fit young men and women for their real life work, have a tremendous bearing upon the efficiency of the people of the city." Mr. W. C. Cauldus, also of the Chamber of Commerce, says: "Our school development is the result of a few years of public support and sympathy." In similar enthusiastic words the leaders of every phase of Cincinnati life express their interest in educational progress.

Let no one infer from what has been said that the people of Cincinnati are agreed upon all of the details of educational policy, nor upon the fundamentals either, for that matter, but they have adopted an educational creed which runs about as follows:

- I. We believe in making the schools provide for the educational necessities of every child.
- II. We believe that this can be done when all work together.
- III. We believe that new ideas are the life-blood of educational advance.

That simple creed adopted by teachers, principals, mothers, manufacturers, dentists and trade unionists, has become a great motive force in the upbuilding of the Cincinnati schools.

The most evident thing about the Cincinnati school organization is its democracy. The feudal spirit of lordship and serfdom

existing in many schools between superintendents and principals on the one hand, and teachers on the other, is nowhere evident in the Cincinnati schools; instead, each teacher, thrown upon her own initiative, is a creative artist, solving her particular problem as she believes that it should be solved, and abiding by the consequences of her failure or success.

Early in his work, Mr. Dyer made it clear that he would not tolerate a mechanical system of education. "Up here on the hill, in a wealthy, suburban district, is a grammar school. Its organization, administration and course of study must necessarily differ from that other school, located in the heart of the factory district. The principal of each of these schools has a problem to face—each will succeed in proportion as he grasps the significance of his own problem and the readiest means for its solution." Is not that a refreshing sentiment from a Superintendent of City Schools? Note this other delicious touch, "My teachers soon learned that I regard the teacher who works exactly like another teacher as pretty poor stuff." Before the axe of such incisive radicalism, how the antiquated structure of the old school machinery came crashing to the ground, to be replaced by a system which recognized each teacher as an individual builder of manhood and womanhood, working to meet the needs of individual children. It is not an idle boast which the English make, when they glory in the absence of a curriculum, for even the best curriculum, if mismanaged, is speedily converted into a noose, the knot of which adjusts itself mechanically under the left ear of teacher and child alike. The school authorities of Cincinnati destroyed both knot and rope by giving to their teachers and principals this injunction: "Make your school fit the needs of your children and of your community."

The old-time, machine-minded School Superintendent, filled with the spirit of co-operative coercion, assembles his teachers "Now let's all work together," he exclaims. "Here, Susie Smith, this is what you are to teach your pupils, and this is the way in which you are to do it." It was in quite a different spirit that Mr. Dyer said to each one of his teachers, "You do your work, I'll do mine, and together we will make the schools go." It was in this spirit that the teachers were called together to confer on the reorganization of the course of study. Each teacher in

each grade had her say in the matter. If the most insignificant teacher in Cincinnati said to Mr. Dyer, "I have an idea that I think would improve the work in my grade," his invariable reply was, "Then try it. There is no way to determine the value of ideas except to try them." By that policy Mr. Dyer surrounded himself with a group of vitally interested people, each one suited to the task in which he believed implicitly, and each one fully convinced that the success or failure of that part of the Cincinnati school system with which he was immediately concerned, depended directly upon his efforts. No wonder the schools succeed!

Vitalizing the Kindergarten.

The kindergartens are at the basis of the educational system of Cincinnati, and they are in charge of a woman who believes in herself and in her work. Perhaps the people of Cincinnati are not justified in believing that their kindergartens are the very best in the whole United States, but Miss Julia Bothwell, who directs them, says, modestly enough, that she has visited kindergartens in many cities, adopting their schemes and improving in response to their suggestions, until she is convinced that no other city in the land can show a better kindergarten system than that of Cincinnati. In truth, her plan is ordinarily referred to as the "Cincinnati idea."

Cincinnati children begin their kindergarten work at four and a half or five, entering the first grade at six. While in the kindergarten, they play the games, and sing the songs that all kindergartens play and sing, but with this difference—their plays and songs are built around the things that they do.

The yellow October leaves of Cincinnati's parks half shadow the activity of the busy classes of little kindergarten folks who go there to work and to learn. The Park Commissioners, like every one else in Cincinnati, are in thorough sympathy with the work of the schools, so they allot to each kindergarten class a plot in the park, in which the children—using all of the tools themselves—plant tulip bulbs under the direction of the park gardeners.

"Tulips are the first thing up in the spring," Miss Bothwell explained, "so we have decided to use them. For years we tried gardens, but children of kindergarten age are not willing to give gardens as much attention as they require; then, too, the gardens

ran wild during the summer, so we have settled on the tulip. After the children have planted the bulbs, they sing and talk about their work. Then, early in the spring, they begin to visit their plots, watching the first shoots of green as they appear, looking eagerly for the buds, and then, at last, as the reward of their interest, picking the flowers and taking them home. Thus, each child, during his kindergarten course, sees the complete cycle from bulb to flower."

Beside this flower-culture in the park, the children grow hyacinths in the school room, visit the woods to collect autumn leaves and spring flowers, make excursions to the country, where they may see animals and crops, and always, for a few days after an excursion, talk about the things which they saw, draw them, sing about them and play games about them. In order to facilitate the work, the Board of Education leases a farm, to which the kindergartens go in succession. By these means, the life of the city kindergarten child is thoroughly linked with nature.

These things are not new in kindergartening, however. They have merely taken firm root in the fertile soil of Cincinnati's educational enthusiasm. The real excellence of Miss Bothwell's experiment consists in connecting the kindergarten with the early elementary grades on the one hand, and with the community on the other.

The first grade children of Cincinnati come back to the kindergarten teachers for an hour's kindergartening once each week, in order to clinch the kindergarten influence on the lives of the first graders. The first grade teachers meet the director of kindergartening once each week for a discussion of kindergarten methods, and an initiation into the kindergarten spirit. Thus the lump of first grade abstraction is leavened with the leaven of kindergarten concretes, and the grade teachers get the spirit of kindergarten work. In the near future, Miss Bothwell hopes to have the kindergarten work extend to the second grade, in order that the spirit, rhythm, harmony and joy of the kindergarten may thoroughly permeate the roots of the Cincinnati school system.

Even more significant,—if anything could be more significant than the breakdown of the ironclad, first-grade traditions,—is the grip which the kindergartens of Cincinnati have secured upon the people. The Cincinnati kindergartener is more than a teacher—

she serves many masters. In the morning she holds kindergarten classes. On two afternoons a week, she does kindergarten work with first grade children; on one afternoon, she holds a conference with the supervisor; on a fourth afternoon, she visits the classes of first grade teachers or confers with mothers' clubs; and on her remaining afternoon, she visits her children in their homes. Out of these varied duties has come first, a group spirit among the kindergarteners, built upon frequent interchange of plans and ideas; second, an understanding of the relation between the problems of the kindergarten and the problems of the grades; third, a sympathetic grasp of the home conditions surrounding the life of many a difficult child; and fourth, sixty-one mothers' clubs, one organized in connection with each kindergarten, which furnish a social gathering place for mothers; an opportunity to influence parental ideas, and a body of invaluable public sentiment.

A little spark often kindles a very great conflagration. The idea of a kindergarten, usually regarded as a little part of the school program, has been evolved until, in this one city, it is a potent influence, working on children, teachers, parents and public opinion.

Regenerating the Grades.

The kindergarten is not alone in its appeal to the child, and in its affiliation with the community. Traditional grade education has likewise been modified and rehabilitated until it makes an appeal to parent and child alike. In the first place, a consistent effort has been made to provide accommodations for the physical education in the grades of the fifty-seven elementary schools. Twenty-five now have fully equipped gymnasiums in which children have two or three periods of exercise each week. In the schools not so equipped, the physical work is confined to calisthenics. Each year the Board of education appropriates five hundred dollars for the Public School Athletic League, which organizes meets and games, open to all public school pupils free of charge. Beside field days, base ball, soccer and foot ball, there is an athletic badge awarded to all pupils who pass an "efficiency" test in athletic activities.

The academic work of the grades is alive with enthusiasm. History, so often made a mass of dead names and dates, is taught

in terms of life. The children learn that history is in reality a record of the things which people did, and of the forces which were at work in their lives. Furthermore, that the commonplace acts of to-day will be the history of to-morrow. Translated into ideas of social charges, history stimulates thought, turning the child's mind from the purely personal side of life to the social activities of which history is made.

Arithmetic and geography begin at home, in the things which the children know and do. Both are taught in terms of child experience. Both call to the child mind the things of daily life.

English, too, which is so important an element in education, is made to reflect child experiences. Teaching the reading-lesson of "Eyes and No Eyes," one teacher asked her class, "Well, children, what did you see on your way to school this morning? What did you see, Elmer?"

"Well, I saw—I saw——" and Elmer sat down.

"I saw that it had been raining in the night by the mud in the streets," said Alice; while John had seen trolley cars, and remembered that the number on one of them was 647.

Another seventh grade girl had read the Psalm, beginning, "Who shall ascend unto the hill of the lord, or who shall stand in His holy place?" After asking what a psalm was, and who wrote the Psalms, the teacher asked:

"What was David?"

"He was the King of Palestine," replied one boy promptly. After straightening out the history, the teacher next asked:

"For what was David noted?"

"For being Solomon's father," ventured one little girl.

"Oh, no," protested a boy. "He was the fighter."

"Sure enough," said the teacher, "would the fact that he was a warrior naturally influence his thoughts?" After an affirmative answer from the class: "Where do we find any evidences of that in this Psalm, George?"

George considered the reading a moment. "Oh, I see, it's where he says, "The Lord might in battle."

After an elaboration of this idea, the teacher went on to ask why David wrote, "Life up your heads, oh ye gates, and the King of Glory shall come in." By careful questioning the class was led to see that cities had walls and gates, that David, who had

won many victories, was accustomed to have the gates thrown wide to receive him, and that his triumphal entries had made a deep impression on his thoughts. After some more discussion, the Psalm was read again, this time with surprising intelligence and feeling.

One eighth grade class in English was engaged in preparing a catalogue of all of the pictures in the school, looking up the painters, their lives, their principal works, and the circumstances connected with the painting of the picture which hung on the school wall. In the same room a girl had written a description of a sunset, in which she had said, "The western sky is illuminated with a fiery red, and the edges of the clouds are also tinted with a silvery hue."

"What would Corot say about that?" asked the teacher.

The girl thought a moment. "I guess he would say that there was too much color."

"Yes," smiled the teacher, "he would say, 'let's go home and wait for a few moments.'"

The essay work in the upper grades is linked with all of the other school work. The children write about civics, architecture, localities, books and pictures. One girl of thirteen wrote on "The Reaper": "As I enter my bed-room, one picture especially catches my gaze. It hangs on the eastern wall. It is the picture of a large city by moonlight. The moon is bright and the stars are out. A beautiful lake borders the far end of the city, and the moon makes the lake look like a mirror. The church steeple stands out clear against the sky. It is a beautiful summer night, and while the city sleeps, an angel descends and bears a little child to the heavens above. Some mother must have given up one of her beloved flowers."

No less valuable are the essays describing an ideal kitchen, a location for a house, a home, school life, and the various other things with which the child comes into contact.

Last, of the academic branches, there is a carefully organized, eighth grade course in civics, which, beginning with the geography and early history of Cincinnati, covers family relations, and the tenement problem; the protection of public health—street cleaning, sewage, water, smoke abatement, and the activities of the Board of Health in providing for sanitation and the suppres-

sion of disease; the protection of life and property; the business life of the community—relation of the citizen to business life, the growth of commerce and industry in Cincinnati; Cincinnati as a manufacturing center; the labor problem, and the regulation of business by the government; the necessity for civic beauty; the educational forces of the community; the care of dependents and delinquents; the functions of government; and the collection and expenditure of city funds. In this way, the child before he leaves the elementary school is given an idea of the real meaning of citizenship.

Beginning in the kindergarten, the art work extends through the high school, including in the lower elementary grades, paper-cutting and pasting related to school work, the seasons, and the holidays. From the third grade on, the children make real products,—trays, boxes, blotter pads, calendars, booklets, and folios,—work which is supplemented by object and constructive drawing and designing.

Shop work is given to boys, and domestic science to girls, in all of the schools. The point at which these subjects are introduced and the amount of time devoted to them, depends upon—what do you think? The regulations prescribed in the course of study? Not a bit of it! It depends upon the needs of the community and of the child.

Schools which are located in tenement districts begin manual training and domestic science with the second grade, though ordinarily they are not introduced until the sixth. Normally the children are given one and one-half or two hours a week of such work, but overage, backward and defective children may spend as much as half of their time upon it. For some of the girls a five-room flat has been rented, in which they are taught housekeeping in all of its forms. Otherwise the domestic science consists of hand and machine sewing; the designing and making of simple garments; the planning and preparation of food, and the organization and care of a household. Wherever possible, the boys make products in their shop work, instead of construction show pieces which have no value.

From top to bottom the grades are shaped to meet the needs of children. Each class and each school is built around this central idea. The school system, instead of taking the usual form

of a cumbersome machine, is a delicate mechanism adjusted to the wants of Cincinnati children.

Popularizing High School Education.

Not content with making the grades interesting, the school authorities of Cincinnati have labored to make the high schools profitable and popular, until ninety-five out of each one hundred children who complete the eighth grade go to the Cincinnati high schools. Further more, during the past six years the high school attendance in Cincinnati has doubled. These two noteworthy statements are the product of carefully matured and efficiently executed plans, and of infinite labor. Yet the results have more than repaid the labor which they cost.

"Our first task," explained Dr. E. D. Lyon, Principal of the Hughes High School, "was to persuade the community that it needed high school training. Next we secured two fine new high school buildings. Then those of us who are engaged in high school work faced the supreme task. We must prove to the people that the expenditures on high schools were worth while, by providing a high school education that would mean something to the pupils and to the community." Note the spirit of social obligation,—a feeling prevalent through the Cincinnati schools.

"Most parents fail to see the importance of the high school problem," said Assistant Superintendent Roberts, "because they never made consistent efforts to have their children choose their vocations intelligently. We began our work right there, at the bottom, by telling the parents of grade children about the high school courses, and what they meant. Eighth grade teachers, under the guidance of Mr. F. P. Goodwin, are expected to talk to their classes regularly on the vocational opportunities in Cincinnati and elsewhere, and to help the children get started right in high school careers. Beside that, we take the grade children on trips to the high schools, showing them on each trip, some striking feature of high school work. Parents' meetings are held, in which the high schools are explained and discussed, and circulars are sent to the parents of sixth, seventh and eighth grade pupils, explaining the high school work as simply as may be."

After arousing such expectations, the high school cannot fulfill its obligations in any way other than by the provision of a thorough course of study adapted to the needs of all types of pupils. The preparation for this in Cincinnati has been made with consummate skill. The pupil, on entering the high school, may select anyone of the nine general courses in which there are twenty-three possible combinations of subjects.

Four of the courses,—General, Classical, Domestic Science, and Manual Training—prepare for various colleges and technical schools. The other five courses—Commercial, Technical Co-operative Course for boys; Technical Co-operative Course for girls; Art, and Music, lead to vocations. Housed in the same high school building is this range of work, which permits boys and girls to select a course which will bear directly on almost any line of work that they may care to follow in later life.

Each course is shaped to give the children who select it a definite training in the line of their interest. The General Course prepares pupils for college; the Domestic Science Course shows girls how to make and keep a home; the Commercial Course turns out book-keepers; the Technical Co-operative Courses, enabling boys and girls to spend part of their time in the school and part in the factory, are arranged in co-operation with the principal industries of Cincinnati. The Art and Music Courses, like the other special work, are in the hands of experts who are competent to give a practical direction to the activity of their pupils.

In passing, it is interesting to note that the people of Cincinnati are getting the best possible use out of their splendid high school equipment. In addition to the regular classes which fill the Woodward High School from 8:30 until late in the afternoon, all day Saturday, the pupils in the continuation courses occupy the building. Five nights a week it is filled by an enthusiastic night school, three thousand strong, and during six weeks of the summer vacation a summer school holds its sessions there. It would be difficult to find a school plant which comes nearer to being used one hundred per cent. of its time. To be sure, such things were not done "in father's time," but then the people of Cincinnati have a theory that while a good thing is worth all it costs, it does not pay to let even the best of things decay for lack

of use. That is why the school system tingles from end to end with vigor and enthusiasm.

A City University.

Beside the kindergarten, elementary schools, and high schools, the City of Cincinnati has a university, which, like all of the other educational forces of the city, is tied up with the general educational program. Those graduates of the Cincinnati high schools who desire to go to college, may pass from the high school of Cincinnati into the University of Cincinnati without a break in the continuity of their education.

The University of Cincinnati is a municipal university. The city appropriates one-half of one mill on the general assessment for university purposes. The board of education votes ten thousand dollars a year toward the maintenance of the Teachers' College, the University Department in which the city teachers are trained. The training school for kindergarteners is affiliated with the University, having the same entrance requirements as the other university courses. In explanation of this close connection between the city and the university, President Dabney begins his 1911 report to the board of directors by saying: "An effort has been made in this report to explain the service of the University to the city and people of Cincinnati. It is therefore not only an official report to the directors, but is also a statement for the information of all citizens." Begun in this spirit of public obligation, the report details the services of the Teachers' College in supplying teachers; of the School of Economics and Political Science in supplying municipal experts; and of the Engineering School for its inauguration of the widely-known industrial co-operative courses,—for be it known to the uninitiated that the five hundred students of the University Engineering School spend alternately two weeks in the school, and two weeks in a shop. More than that, the Engineering School furnishes experts for municipal engineering work.

That the students of the University may feel the interest of the city in their work, preference is given to the University graduates in appointments of teachers, of municipal engineers, and of employees on such municipal work as testing food, inspecting construction, and the like. University students may thus occupy

their spare time in practical municipal work. "The University should lead the progressive thought of the community," says President Dabney, and by way of making good his proposition, he avails himself of every opportunity to turn his students into municipal activities, or to co-operate in any way with the forces that are making for a greater Cincinnati.

Special Schools for Special Classes.

There are children in Cincinnati, as in every other city, who cannot afford to go to the high school. The easiest answer to such children is, "Well, then, don't." The fairest answer is a system of schools which will enable them to secure an education even though they are at work. Cincinnati in selecting the latter course, has opened a school for the education of every important group unable to attend the high schools in the city, who wish to avail themselves of advanced educational opportunities.

First, there is the night school work, which, in addition to the ordinary academic courses, offers special opportunities in machine shop practice, blacksmithing, mechanical and architectural drawing, and domestic science. As these courses are offered in the Woodward High School and the other new buildings, the students have all of the advantages of high school equipment.

Night school, coming after a day's exertion, is so trying that only the most robust can profit by it. No small importance, therefore, attaches to the operation of the compulsory continuation schools under the Ohio law, which empowers cities to compel working children between fourteen and sixteen years of age to attend school for not more than eight hours a week between the hours of 8:00 a. m. and 5:00 p. m., hours which will presumably be subtracted from shop time. By means of this adaptation of the German system, even those children who must leave school at fourteen are guaranteed school work for the next two years at least. Although this is but a minimum requirement, it represents a beginning in the right direction.

No less significant than this compulsory system are the voluntary continuation schools for those over sixteen years of age, which have been established for machinists' apprentices, for printers' apprentices, for saleswomen, and for housewives. The first two courses are conducted under the direction of a genius

named Renshaw, who takes from the machine shop boys of every age, nationality and experience; fits them somewhere into his four-year course; gives them a numbered time-clock from his time board; teaches them reading, writing, arithmetic, mechanical drawing, geometry, algebra and trigonometry by means of an ingenious series of blue-prints, which constitute their sole textbook; visits them in their shops, giving suggestions and advice about the shop work; and finally sends them out finished craftsmen, with an excellent foundation in the theoretical sides of the trades. The work is entirely voluntary, yet so excellent is it that a number of Cincinnati manufacturers send their apprentices to Mr. Renshaw, paying them regular wages for the four hours of credit which the said Renshaw registers weekly on the boys' time cards. "One firm sends sixty boys here each week," commented Mr. Renshaw's assistant. "That makes two hundred and forty hours of school work each week for which they pay regular wages. Well, sir, the superintendent there told me that they didn't so much as notice the loss."

"I tried to explain my system to one superintendent," said Mr. Renshaw, "but he wouldn't even listen." "It makes no difference how you do it," he grumbled, "I don't care about that. I know that the boys are neater, more careful, more accurate, and better all-around workmen after they have been with you for a while. That's enough explanation for me."

Acting on such sentiments, the manufacturers pre-emptorily dismisses the boy who does not do his school tasks satisfactorily. The responsibility is in the school, whose growing enrollment and influence tell their own story. Firms send their boys to the school with the comment that the hours of school time, for which they are paid, do not add to the cost of shop management, but do add to the value of the boys to the shop. Increased efficiency pays.

A school of salesmanship for women has met with a like success. The leading stores, glad of an opportunity to raise the standard of their employees, grant the saleswomen a half day each week, without loss of pay, during which they take the salesmanship course. The course has the hearty backing of the best Cincinnati merchants, who see in it an opportunity, as Mr. Dyer put it, "to make their employees the most skilled and intelligent,

the most obliging and trustworthy, the best treated and best paid—in short, the very best type of saleswomen in the country.”

That this form of educational work may keep pace with the demand for it, the school authorities offer industrial instruction in any pursuit for which a class of twenty-five can be organized.

“A large number of women were born too soon to get the advantage of the courses in domestic science now being offered in our high schools,” comments Mr. Dyer in his dry way. Scores of such women anxious to learn all that was known about domestic arts constituted a class for which the school was well equipped to provide. “Then suppose we give them what they need,” said Mr. Dyer. Just fancy: A continuous course in domestic science! Yet there it is, in Cincinnati, with an enrollment of more than eleven hundred women, attending the public schools to learn domestic arts. What could be more rational than this Cincinnati system of making a school—even though it be a continuation school—to fit the educational needs of Cincinnati people—grown-ups and children alike?

Special Schools for Special Children.

The Cincinnati schools provide for special children as well as for special classes of people. First, there are the unusually bright children, who “mark time” in the ordinary classes. These children were placed in “rapidly moving classes.” While omitting none of the work, they were allowed to go as fast as their mental development would allow them, instead of as slowly as the other members of the class made it necessary for them to move. At the beginning the teacher found these exceptionally able children lacking in effort and attention, qualities which they had not needed to keep their place in the grades. “The extra work and responsibility stimulated their mental activity, increase their power of attention, fostered thoroughness and accuracy, developed resourcefulness and initiative, and those other qualities necessary for leadership.” Why should it not be so? Why should not the specially able child be taught as thoroughly as the defective one? Yet Mr. Dyer, speaking from experience, remarks, “Strange to say, it is harder to establish such classes than defective and retarded ones.” Strange indeed!

For the sub-normal or retarded children Cincinnati has made ample provision. Spending from a quarter to a half of their time in manual work, the children are no longer tortured with the doing of things beyond their powers. The overgrown boys have instruction in shop work. The overgrown girls have a furnished flat in which they learn the arts of home-making at first hand. There are in all over four hundred children in these schools.

Similar accommodations are provided for other special groups. The anemic and tubercular children are taught in the open air schools; six teachers are detailed to instruct the deaf children; one teacher devotes her time to the blind children; and ten teachers are employed to take charge of those children who are mentally defective. Thus, by adjusting the schools to the needs of special groups of people, and of special individuals, Cincinnati is providing an education which reaches the individual members of the community.

Playground and Summer Schools.

The vacation school is planned to meet the needs of the children in the crowded districts during the hot summer months. "For that reason," says Mr. Dyer, "it provides industrial work of all kinds unassociated with book instruction, but mingled with a great amount of recreational activity,—excursions, stories, folk-dancing, and a wide variety of games."

The field of industrial activity is a broad one, including cooking, nursing, housekeeping, sewing, knitting, crocheting, weaving and basketry; drawing and color, brush and plastic work; bench work with tools, making useful articles; sports and games, including folk-dancing for girls and ball for boys. The primary and kindergarten classes offer a delightful round of song, story, games, excursions, paper work and other forms of construction. For the girls who have to take care of babies there are special classes. The boys make useful articles in the shops, and the girls, in sewing room and cooking laboratory, learn to do the things around which the interests of the home always center. By co-operation with the park commissioners, the playgrounds were made an integral part of the summer school work.

Beside the recreational summer schools, Cincinnati has maintained for the past five years an academic summer school, in

which children might make up back work in school, or do special work in any line which was of particular interest to them. In these schools "the very best instructors that can be secured" are employed, and their recommendations are accepted by the school principals when the fall term opens. "This school is one of the means taken to deal with the problem of repeaters in our schools," says Mr. Dyer. "Instead of requiring children who are behind to fall back a year, they may, if they are not hopeless failures, but only deficient in a few studies, remove their deficiencies in the summer school and go on with their class." "We have followed up these pupils," Mr. Dyer adds, "and found that a normal percentage keep up with the class in succeeding years."

Mr. Dyer and the Men Who Stood With Him.

A spirit of comradeship and hearty co-operation breathes from every nook and cranny of the Cincinnati schools. Principals and teachers alike sense the fact. Alike they aim toward the upbuilding of the schools.

"Never in my life have I found such a spirit of mutual helpfulness," says Assistant Superintendent Roberts. "Every teacher has felt that she had a part to play, that she counted, that her suggestions were worth while, and she has worked earnestly toward this end. Everywhere I encounter the same willingness to co-operate with the schools," said Superintendent Condon, after spending three months in Mr. Dyer's vacant place. "There is a heartiness in it, too, that grips a man. There is always the jolliest good-fellowship in the Schoolman's Club," exclaimed a grammar school principal. "It's always 'Roberts' and 'Lyon' and 'Dyer' there. They're as good as the rest, no better. We all go there to work, and to work hard for the schools."

On such a spirit is the school system of Cincinnati founded. From its point of vantage, set upon its high hill of ministry to child needs, it flashes like a searchlight through the storm of Nineteenth Century pedagogical obscurity. The optimist sings a new, glad song; the pessimist is confounded; the teacher after educational truth uncovers reverently before this masterpiece of educational organization, this practical demonstration of the wonders that may be accomplished where head and heart work together for the schools.

Such is the triumph, but whose the glory?

"It is not mine," protests Mr. Dyer, "I did only my part."
"Nor mine, nor mine," echo his assistants. Truly, wisely, bravely spoken. The glory is not to Mr. Dyer, nor to any other one man or woman—the glory is to Mr. Dyer and the men and women who worked with him for the Cincinnati schools.

"My predecessor was an able organizer," explained Mr. Dyer, in his new Boston office. "He left things in splendid condition, and we took up his work. There were five things which marked great epochs in the upbuilding of the Cincinnati schools:

First, we established the merit system for the appointment of teachers.

Second, we improved the school buildings and equipment.

Third, we organized special courses for children who were not able to profit by the regular work.

Fourth, by putting applied work in the grades, we gave the children a chance to use their hands as well as their heads.

Fifth, we enlarged the school system by adding buildings and courses until there was a place in the schools for every boy and girl, man and woman, in Cincinnati, who wanted an education.

"That was the sum total of our work. It was a long and difficult task." Mr. Dyer's tall form straightened a trifle. His earnest, determined face relaxed. From under his bushy eye-brows flashed a gleam of triumph—the triumph of a strong, purposeful, successful man. "But when it was all over," he concluded, "and when the things for which we had striven were accomplished, we knew that they were worth while."

Such is the spirit in which Mr. Dyer and the men and women who worked with him have worked for the advancement of education; such is the spirit of co-operation and progressivism which enables them to build a great city school system.

The "Social Center" Idea

[From "A Hand Book Containing Suggestions and Programs for Community Social Meetings at Rural School Houses." Prepared by L. J. Hanifun, State Supervisor of Rural Elementary Schools, under the direction of M. P. Shawkey, State Superintendent of Education, West Virginia.]

It is generally agreed that there is less opportunity for the people of the country to get together and have a general good time than there used to be. There used to be husking bees, the barn raisings, the threshing days, even the log rollings. There used to be the apple cuttings, the bean stringings, the sugar makings. There used to be the spelling bees, the old time "literaries," the "heated" debates. There are not so many of these "diversions" to-day. In many communities nearly all of these have been entirely abandoned. Nothing has taken their places. Many of the rural churches have been abandoned, the ministers having either starved out, or left the country. Perhaps the best means we have left for getting the rural folk together is the Sunday School. This, however, is usually active only during the summer months.

What are the results of all this change? In the first place the people in the country are without amusement, recreation, or social life. They do not even visit one another as they did formerly. Families live in varying degrees of isolation. This situation makes living in the country dull, uneventful, uninteresting. As a final result many of our country boys and girls and not a few older ones leave the farms and go to the cities, where they congregate on the streets, at the "movies," at the club, at the dance halls, at the theatre, sometimes at the poolrooms, gambling dens, evil resorts, and saloons. And we are not to censure too severely these young people for leaving the farms and going to the cities. Man is a social animal. He takes to society naturally. Isolation from his fellows is unendurable to youth or grown-up. If he cannot find congenial associates in the country he will go to the city. If he cannot find good company there he will find bad. He must have companions. Therefore, just as long as the country

fails to provide some means of social enjoyment the boys and girls will continue to go to the cities in large numbers.

This migration to the city would not be so bad if the city were the best place in the world for these young people to live. As a matter of fact, no city is either all good or all bad. But in every city there is opportunity for young people to be bad. Many of our country boys and girls go to the city and make good. We sometimes boast of the large number of men from the country who now hold responsible posts both in business and in the professions. But we fail to mention the large number who have utterly failed to make of themselves anything except crooks, criminals or loafers. Whether a country boy will make good in the city depends largely upon the boy in the first place, and in the second place upon the kind of company he gets into when he reaches the city. Other things being equal the country boy has greater evil temptations in the city than the city born youth, for the reason that the latter grows up amidst city environment, becomes accustomed to it as he grows, while the country boy plunges immediately into an entirely new environment, to which he is wholly unprepared to adjust himself. When a country boy or country girl leaves the farm for the city the father and mother can never be quite sure that their child will not fall by the wayside as one of the tares.

What, therefore, shall be done to make living in the country tolerable to our country youth? The solution devolves upon the school. Upon the teacher rests the immediate responsibility of leadership in all that may be done. She must secure the co-operation of the ministers, of the parents and citizens, in devising ways and means of bringing the young people together often for social enjoyment, mental recreation, even for merely good fellowship. The boys and girls will do their part if only proper leadership and encouragement are afforded them.

1. Personal Work.

The success of these community meetings will depend very largely upon the personal work of the teacher, and nothing will count for so much as the teacher's personal acquaintance with the patrons of the school. If the people know the teacher personally, and have confidence in her, they will gladly respond to her leadership.

2. Advertise.

The pupils themselves are the best advertisers if properly directed and encouraged. The county papers can usually be utilized to advertise the program. A few notices should be posted in conspicuous places.

3. Begin planning at the opening of the session.

The first weeks of the school term is the best time to begin the work. The first meeting should be held not later than at the end of the first two weeks.

4. Make the first meeting a good one.

If the first meeting is a failure it will be difficult to get the people out next time. The people will get a lasting impression, whether favorable or unfavorable, of the first meeting.

5. Make each meeting worth while.

If there is to be an entertainment, the program must entertain. If it is an instructive program there must be something that the people can take away with them. Make the program such that the people will feel that they have been repaid for their coming.

6. See that the meeting begins on time.

Do not bore those who come on time by delaying the beginning of the program until late comers arrive. After the first meeting the people will be on time if it is understood that the program will begin at the hour set.

7. It is the citizens' meeting.

It must be understood that the meeting is wholly a school affair. The citizens must have prominent parts both in the organization and on the programs. It is suggested that some citizen be made chairman. Rarely should the teacher fill this office. But the teacher should be behind all that is done. She must be the guiding spirit. She may well so direct the organization that the best presiding officer will be chosen or that the most suitable persons shall appear on any given program. She must be the leader but must rather lead through others. A skillful teacher can do this.

8. Have one or more citizens placed on most of the programs.

Such recognition of the patrons will not only add strength to the program but will also avoid the appearance of its being merely a school affair.

9. Have regard for other community activities.

From fifteen to twenty of these community meetings should be held within the term. It is suggested that as many of them as possible should be held during the fall months so that when there is a religious revival or other meetings in the community these meetings at the school houses may go over until another time. These meetings may be held weekly for two or three of the first months of the year. The teacher must be governed by the local conditions.

10. The "Spelling Bee."

There is general criticism of our present methods of teaching spelling and at the same time there is general demand for the old fashioned spelling bee. At least four or five of the proposed meetings should be these old time spelling bees.

11. Do not scold the people for not coming.

People can be led to do anything. They can be driven to do nothing. If they do not come to any given program see them meanwhile, say you missed them and invite them to come to the next program.

[The following valuable contribution to the discussion of the Russell Sage Foundation Report was received after the announcement of the conclusion of the discussion last month.—Ed.]

Virginia and The Russell Sage Foundation Report

By R. C. Stearns, Superintendent of Public Instruction.

The Sage Foundation suggests ten tests, five of which may be approved without question, namely, enrolment, school days per child, attendance at large, attendance in high schools, and length of school year; and five which seem to me less reliable, namely, salaries, cost of school plant, expenses per child, expenditure and wealth, and daily cost.

To compare cost of salaries paid teachers in New York City and in a county in this State without towns or railroads is absurd. The cost of school plants varies according to location, climate, and purity of public service. There are buildings in this country that cost of hundreds of thousands of dollars, yet they are neither as sanitary nor as well ventilated and lighted as some of our thousand dollar buildings. One of the earliest discussions I engaged in regarding the Sage report took place in front of a school building in a Northern city, concerning which the city superintendent is reported to have said: "There is a million dollars of graft in this building."

Besides, to stress relative expenditure and wealth is to despair under all of the conditions which surround us. Our most effective appeal is to those poor in this world's goods, but rich in faith. People of that type are the ones who build and beautify school houses all over Virginia,

The Sage Foundation tests must be condemned because they take too much account of the pecuniary side of school administration. They fail utterly because they take no account of growth as a test of efficiency.

Using the figures of 1910 the Foundation issued a pamphlet in 1913 placing Virginia forty-first in the list of States.

For proof, the pamphlet asserted that only 61.8 per cent. of Virginia's school population was enrolled in the public schools. As a matter of fact, our enrolment that year was 65 per cent., or 402,109 out of a school population of 616,168.

We show in 1913 an enrolment of 427,801 out of a school population of 616,168. This is 69 per cent., and when we take the whites alone we have an enrolment of 306,415 out of 398,408, or 76%.

When one takes the enrolment in the State of Washington, given highest rank in the Sage report, and compares the enrolment in that State as given by the United States Census Bureau in 1910 with our figures for 1913, computed on the United States census basis, he finds Virginia 69.6% and Washington 69.3% in native white enrolment. If Virginia can do this on a per capita expenditure of seven dollars, as compared with thirty-two dollars in Washington State, where lies efficiency?

Aye, more, where are the figures that should tell of the sacrifices of poorly paid teachers and much criticised school boards to accomplish these results? I doubt whether our relative increases of 17,970 in enrolment and 17,066 in average daily attendance during the past session have been surpassed in any State.

If one asks why this apparent variance between the figures given by our State Department and the United States Census Bureau, I reply that we have the school age 7 to 19, while the Census Bureau adopts the school age 6 to 20. and I add that keeping children 6 years of age out of school costs us from twenty to thirty-five thousand in school enrolment every year.

The Sage Foundation gives us thirty-third place in high school efficiency because after only four years of state-wide effort we had forty-four pupils in high schools for each thousand in elementary schools, when New Hampshire, which was given first rank, had 118. New Hampshire began her high school development as a special feature of educational activity in 1781 when Dr. Phillips endowed the famous academy at Exeter.

New Hampshire may be said to be the home of the traditional high school, and certainly no progressive in this good day would suggest the traditional or classical high school for negro children. Eliminating the enrolment in negro schools, I find that Virginia had in 1910 sixty-four pupils in public and private high schools for each 1,000 of elementary enrollment and eighty in 1913. This would put us between Illinois (22nd) and New Jersey (23rd) in 1910, and between Ohio (16th) and Kansas (17th) in 1913, if we adopt the 1910 basis for the year last named. Our public high schools enrolled 20,244 in 1913, an increase of 2,358.

I wish to say in this connection that the higher work we are planning for negroes will be industrial rather than classical. Already a number of colored high schools have been established whose graduates will be given teachers' certificates to supply a great necessity.

The Sage Report is a valuable medium of comparison among States if one uses the United States Census Bureau reports to check and interpret its figures, but as a document offering usable facts or to be used to stimulate progress, it is like the almanac of three years ago.

I have dwelt at length on the Sage Report because it has been so widely quoted by our speakers and newspapers and because I am deeply impressed with the fact that our system needs just now from platform and press thoughts that hearten and words that cheer. It is in education that we must seek the real "Eldorado." The advice given by Poe in his remarkable poem of that name, where he says: "Ride, boldly ride," is in every sense apropos. We are on the right track and hope to prove that fact by what is shown in the figures of this report.

To measure the efficiency of our system county by county, the Department of Public Instruction has used six tests to which others will be added. A table has been prepared giving for each county in line one the enrollment for eight years (1906 to 1913), in line two the average daily attendance, in line three the number of schoolhouses, in line four the total number of school rooms, in line five the high school enrolment, and in line six the number of visits by division superintendents. Later we must add lines showing the effect of teachers' associations and school leagues. City tests must also be arranged, but sufficient unto this day of rural development are the county tests.

The progressive rural school policies in Virginia during the past eight years have been consolidation of schools, development of high schools, better supervision, a State system of certifying teachers, more schools to train teachers, vocational studies, demonstration work, school fairs, proper school buildings, medical inspection, sanitary surroundings, an organized teaching force, and co-operation with parents, to which must now be added State aid for remote or destitute localities.

An International Congress of Education

The largest educational organization in the world is coming to the Panama-Pacific International Exposition to lend dignity and learning to the celebration of the completion of the Panama Canal. James A. Barr, Chief of the Exposition's Bureau of Conventions and Societies, estimates that more than 40,000 pedagogues will be enrolled in the active and associate list of visiting members when the National Education Association assembles during the vacation month of July, 1915. In this enrollment, representatives of the widest extremes in the science of teaching will be found, from the president of venerable university institutions to the not less important aids to a nation's literacy—those who have charge of the instruction of the boys and girls everywhere throughout the United States.

At the last convention, which was held in Salt Lake last July, the vote to meet in San Francisco was practically unanimous. When the next assemblage of teachers is held in St. Paul, in July, 1914, it is expected that this action will be ratified with enthusiastic unanimity, and in this assumption to provide for an International Congress of Education to be held in San Francisco also in July, 1915.

Secretary Durand W. Springer, of the N. E. A., went to Washington recently to meet President Joseph Swain and United States Commissioner Philander P. Claxton and map out a plan to interest the pedagogic experts of Europe in the contemplated international congress to the end that the assemblage of instructors be in fact as well as name, truly international.

That the interest in the forthcoming meeting of teachers is widespread throughout the United States and Canada is manifested by the volume of letters to the Exposition asking for information concerning costs and accommodations. It is evident that the heroines of many a sequestered school district are saving their pennies against the expenses of a trip to this convention, which promises to be of epochal importance in the history of education.

In connection with the convention of the N. E. A., the University of California is planning a summer school of unusual interest and value which will correlate with the convention in advantages to the thousands of visitors. President Benjamin Ide Wheeler, as one of the commission on the International Congress of Education appointed by the N. E. A., last July, is naturally taking an interest in the plans formulating for the summer school of 1915 and thus the advantages to teachers of all grades and classes, as well as to the layman merely interested in the progress of education bid fair to be manifold, inclusive, as they are, of the meeting of the National Education Association, the assemblage of the greatest of the world's great teachers in International Congress, the inestimable benefits of the International Exposition; the Berkeley Summer School and last, but not least, a vacation in Sunny California.

Department of Literature

BOOK REVIEW

The Psychology of Learning.

An Experimental Investigation of the Economy and Technique of Memory. By E. Meumann, Translated from the Third Edition of "The Economy and Technique of Learning," by John Wallace Baird. D. Appleton Co., New York, 1913. pp. xix+393.

One of the ideals that the modern educator is trying to attain is the most economical way of learning. To meet the urgent demand for methods of learning which shall be psychologically most appropriate and which shall embrace all the different kinds of learning and the application of the methods of psychology to problems of pedagogy and practical life, is the aim of the present monograph.

The results of this volume are drawn in the main from psychological experiments of the combined efforts of students of psychology and education in the United States and Germany. In both countries there is a deep-rooted conviction that experimentation is the guiding idea in treating the most important prob-

lems of the science of education, and that practice must be modified on this point, if the methods of learning and the methods of teaching shall be psychologically sound.

Of far reaching importance has been the constant interchange of scientific ideas and mutual inspiration of these two countries. Indeed, it is in these two countries where the findings of scientific investigations find most ready application. So strongly is Dr. Meumann convinced of this community of interest that he gladly consented to the publication of the translation of his "Economy and Technique of Learning," in order that it might be made accessible to a larger number of American readers.

The meaning of the economy and technique of learning is explained in the introduction. Chapter I presents a survey of the modern psychology of memory as demonstrated by experimental psychological investigations. The older psychology regarded ideas simply as copies of particular things. From experimental investigation it follows that an idea is not simply a revival of a definitely perceived thing, but is always the product of many perceptions, and of their subjective elaboration by the perceiver. The older psychology assumed that memorial activity is to be explained by means of laws of association as formulated by the philosophers. Experimental psychology demonstrates the special conditions under which the association and reproduction of ideas takes place. Chapter II discusses the functions of memory. From point of view of means employed in the memorial acquisition of data three chief classes of memorial function are differentiated. 1. The activity of noting impressions by means of observation alone,—or observational learning; 2, the activity of learning impressions in consequence of the associations into which they have entered,—or associative learning; 3, the activity of remembering experiences in consequence of our discovering their interrelations,—or rational learning.

Chapters III and IV deal with observational learning: the technique of observing and learning. Under this are discussed the analysis of observational noting and the experimental investigations of observational noting. Chapters V, VI and VII are devoted to associative learning: the technique and economy of learning. The following topics are discussed under this head: Memory Types, Learning Types, and Ideational Types; More

Detailed Description of Ideational Types and Memory Types, and their Fundamental Characteristics; Economical Learning; The Conditions and the Technique of Mechanical Learning; The Learning of Significant Materials; The Experimental Investigation of the Effect of Learning; Stages of Learning, Retention and Forgetting; The Education of Memory in the Schools; The Actual Memorial Efficiency of School Children Compared with the Results of Experimental Investigations. Three Appendices are added. Appendix I, The Construction of Series of Nonsense Syllables. Appendix II, The Meaning of Economy of Time and Energy in Learning. Appendix III, Addenda from the most Recent Literature.

This book is most valuable in beginning to lay a secure foundation for the technique and economy of mental work. It, too, points out the fact that there is a new branch of pedagogy which may be called the technique and economy of teaching, which must be on a scientific basis as well as the methods of procedure in learning are to be based upon a sound psychological, technical and economical foundation. The book has a very practical value in that it not only gives the results of these investigations, but indicates the significance of these results for the work of the teacher.

Laura Emily Mau, Leipzic, Germany.

"Lichen-Spotted Stone."

Within my hand I hold
A piece of lichen-spotted stone—
Each fleck red—gold—
And with closed eyes I hear the moan
Of solemn winds round naked crags
Of Colorado's mountains * * *
White-winged and proud,
With stately step and queenly air,
A glittering, cool and silent cloud
Upon me sails,
The wind wails,
And from the canyon stern and steep
I hear the furious waters leap.

Hamlin Garland in "Poetry."

Literary Snap-Shots

By Mary Eleanor Kramer.

Walt Mason, who has been so happily called "the original breakfast table poet," and whose clever prose poems are read from one end of the country to the other, is the author of a charming new book, "Rippling Rhymes." The complete title, which is as "catchy" as the poems within, is as follows:

"Rippling Rhymes to suit the times, all sorts of things embracin'
Some gay, some sad, some not so bad, as written by Walt
Mason."

The book is cosmopolitan, dealing with both work and play, with all types of a work-a-day people of both city and town. The splendid philosophy, discernible under all the fun and gayety, is most sane and practical. Perhaps one of the most sincere appreciations the book has received is that of the high-school boy who said: "Just one mistake; that book should have been called 'Rippling Rhymes.'"

(Rippling Rhymes, by Walt Mason. A. C. McClurg & Co., Chicago.)

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"The Life of Florence Nightingale" will be published very shortly by Messrs. MacMillan. It is from the pen of Sir E. T. Cook, who has had access to the family papers, and so has been enabled for the first time to give a full account of this remarkable woman.

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"The Broken Halo" is the latest production of Florence L. Barclay, the author of "The Rosary," "The Following of the Star," etc. Like all this writer's work the story is pure, and the characters interesting and lovable. "Master Dick," the youthful breaker of "The Halo," presents a study which will prove of interest to teachers, while all will love the "Little White Lady."

("The Broken Halo," by Florence L. Barclay. G. P. Putnam's Sons.)

Truly, Kin Hubbard's "Back County Folks" is the most original and attractive volume of humor of the year. It is a book for a dreary day, a book for the tired teacher, a book for the whole family. Its binding of old-fashioned "calico" is as unique and appealing as the philosophy within its covers.

("Back Country Folks," by Kin Hubbard. Abe Martin Publ. Co., Indianapolis.)

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The Christmas number of Scribner's Magazine contains much of interest and help to teachers. All will read with pleasure "A Schoolboy's Interview with Abraham Lincoln, as told by the boy," William Agnew Payton. Vernon Lee's travel sketch on Cornwall, Wales and Ireland (a continuation of his "An English Writer's Notes on England") will prove a class-room delight, as will Theodore Roosevelt's "The Life History of the African Buffalo, Giant Eland and Common Eland." Winifred Louise Taylor's third paper on "The Man Behind the Bars" presents some interesting studies in human nature.

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"The Summit of the Years," John Burrough's latest collection of essays, are written with his characteristic charm. Among the titles are "The Summit of the Years," "In the Circuit of the Summer Hills," "Intensive Observation," and several others. In the preface, Mr. Burroughs says in part: "In publishing another volume of mixed essays, most of them written in the overtime I have made since I passed the Scriptural limit of three-score and ten years, I am cherishing the hope that my reader will not wish that I had stopped at the boundary fixed by the Psalmist. There is no other joy in life like mental and bodily activity, like keeping up the live interest in the world of thought and things."

Those of us who have read Mr. Burrough's output of the years, are far from wishing that he should stop at the aforesaid boundary, on the other hand, we hope to yet have many more inspiring volumes from his gifted pen.

("The Summit of the Years," by John Burroughs. Houghton-Mifflin Co.)

* * * * *

Clara E. Laughlin's "The Work-a-Day Girl" is a study of the present day conditions in the industrial world of women. It is

the work of a woman who has made a life study of social and industrial conditions and is written with sympathy and understanding. It is a vital question handled in a masterly manner. The language is plain and out-spoken, and will cause its readers to think. Welfare workers will find of use in their work, humanitarians will be the better for reading it.

"The Work-a-Day Girl," by Clara E. Laughlin. Fleming Revell Co.)

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The December Atlantic has an interesting article on China, "Secret Annals of the Manchu Court—The Sack of Yang Chou-Fu." From the pen of Mr. W. L. George, a prominent spokesman of the Feminist movement in England, comes "Feminist Intentions," while Wendall Phillips Stafford contributes a poem, "Panama Hymn," all of which will be of interest to educators in general. An interesting chapter out of real life is Elinore Rupert Stewart's "Letters of a Woman Homesteader."

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"When Mother Lets Us Act" is a book all children will delight in. It tells how to make costumes, frames for tableaux, and is, in fact, a complete compendium for the mother or teacher who desires to delight childish hearts by permitting them to enact little plays, etc. Teachers, will find it helpful and interesting.

("When Mother Lets Us Act," by Stella George Stern Perry. Moffat, Yard & Co.)

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"Collected Poems of Alfred Noyes." The wider grows the fame of Alfred Noyes the clearer it is that here is a poet whose work wins the ear of the general reader as triumphantly as it earns high praise from critics. Like the most forceful figures in English literature, from Chaucer and Shakespeare down to Kipling, his poetry has a directness and a simplicity which appeals not only to habitual poetry readers, but also to those who wait for the more robust voices.

This edition has been revised by Mr. Noyes himself. It contains all Mr. Noyes has published on either side of the Atlantic, with the exception of two or three inconsiderable pieces of early work, cancelled by the author. New poems, hitherto unpublished, are also included. "The Flower of Old Japan," "The Golden Hynde," "The Enchanted Island," "Sherwood" and "Tales

of the Mermaid Tavern" are among the contents. The volumes are tastefully executed in every detail.

("Collected Poems," by Alfred Noyes. Frederick A. Stokes Co.)

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"Our Common Road," by Agnes Edwards, is a collection of short essays by a well-known Boston newspaper writer. In sincere and convincing fashion, they take up the simple events and predicaments of everyday life, making practical suggestions as to the happiest way to meet the daily round.

("Our Common Road," by Agnes Edwards. Houghton-Mifflin Co.)

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Topics in Periodicals, which will prove of interest to teachers (December, 1913):

- Arles, A Pilgrimage to. Richard LeGallienne—Harper.
- Athletics, America First in. Carl Crow—World's Work.
- Australian Bypaths. Norman Duncan—Harper.
- "Black Death," The, in Manchuria. B. J. Hendrick—World's Work.
- Buffalo and Eland, African. Theodore Roosevelt—Scribner.
- Business, Better. William Hard—Everybody's.
- Capital Punishment and Life Imprisonment. Winifred L. Taylor—Scribner.
- Christmas, A, for Cities. Gerald S. Lee—Everybody's.
- Currency Reform Under Wilson. E. S. Mead—Lippincott.
- Educated, The Luxury of Being. H. S. Canby—Harper.
- England and Ireland. H. Fielding-Hall—Atlantic.
- Foreign Policy, The American. W. Morgan Schuster—Century.
- Fraternity Women. Sarah G. Pomeroy—Century.
- Grant and Hayes Administration. Madame de Hagermann-Lindencrone—Harper.
- Houston, of Agriculture. Arthur W. Page—World's Work.
- McClure, Autobiography of Mr. S. S.—McClure.
- Mexico, The President and. George Harvey—North American.
- Mission Play, The, of California. Henry Van Dyke—Century.

Norton, Charles Eliot. W. D. Howells—North American.
 Peanut Industry, The. E. M. Woolley—McClure.
 Sand, George. Florence L. Ravenal—North American.
 Singers, Three American. Will S. Cather—McClure.
 Water-Power War, The. H. B. Fuller—World's Work.

* * * * *

"The Joy of Youth," by Eden Phillpotts. This is a beautiful story of art and Italy and human nature. Mr. Phillpotts contradicts the suggestion that the book contains an autobiographical element; he declares that the story is impersonal, as all his work is, and that his only concern is to create character. He certainly has succeeded in "creating character," for this work is by far the best he has yet given us. The philosophy it contains creates thought, the descriptions are beautiful, and the characters, for the most part, are lovable and natural.

("The Joy of Youth," by Eden Phillpotts. Little, Brown & Co.)

* * * * *

"A Son of the Hills," by Harriet T. Comstock. Mrs. Comstock has a love for simple backwoods primitive folk, and in this her new book, she deals with people close to the soil, for the scene is laid in the Ragged Mountains of Virginia, a region which has problems all its own. In speaking of the people of this region Mrs. Comstock said: "In the Virginia hills I was saddened by the apathy—the shiftlessness—the deplorable lethargy that saps manhood and makes nothing in life seem worth while. It is a strange and dreadful curse, that dreamy indolence. Doctors say it is the hookworm—whatever it may be, it is the worst fate that can fall upon mankind." Mrs. Comstock herself, alert, keen, a valiant fighter for Woman Suffrage, is notably appropriate to decry sloth and feebleness. Into this new novel, she has poured her whole strength.

("A Son of the Hills," by Harriet T. Comstock. Doubleday, Page & Co.)

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Teachers of the primary and intermediate grades will be delighted with the new month by month Plan Books by Marian M. George. Of the many plan books now on the market, Miss George's are the most excellent. The plan of arrangement, the diversified interests, the information provided—all are admirable.

(The Plan Book, by Marian M. George. A. Flanagan Co.)

1000 Pertinent Literary Queries

By Mary Eleanor Kramer.

ANSWERS TO QUERIES PUBLISHED LAST MONTH.

1—100

1. On the site of the United Bank Building, New York City, was "Ugly Hall," where were held the seances of the "Ugly Club," a circle of handsome young men, among whom Halleck was a leading spirit.

2. In the basement of a store in Broadway, New York, two or three doors from Bleecker street, was before the Civil War, Charles Pfaffs' Wine-Cellar,—sung by the bards of "Vanity Fair" and "The Saturday Press"—the nightly haunt of the brightest of New York's literary Bohemians, who came here to smoke and quaff. To this group belonged Aldrich, Winter, Whitman, Artemus Ward, Fitzhugh Ludlow, George Arnold, the "Poet of Beer," who sang "We are very merry at Pfaff's," and Fitzjames O'Brien, the "gypsy of letters."

3. Jonathan Swift said, "I shall die like that tree, from the top down," meaning insanity.

4. Samuel Taylor Coolidge was termed "The Sage of Highgate."

5. "The Naulahka," meaning the "very dear or precious," is the American home of Rudyard Kipling, in Connecticut.

6. In the autumn of 1835, Ralph Waldo Emerson and Miss Lydia Jackson were married in a fine old mansion in Plymouth, Mass., called the Winslow House.

7. In the winter of 1894, Irving Bachellor, Stephen Crane, Willis B. Hawkins and Henry Fielding rented a little chalet on Monkey Hill (New York City) and hung out "The Sign of the Lanthorn." This chalet is fully described in Bachellor's "Eben Holden."

8. George Elliott said "Our deeds shall travel with us from afar."

9. Shakespeare wrote the lines: "Kissed his master, and cried, "All Hail!" when he meant all harm."

9. Henry Wadsworth Longfellow was a direct descendant of John Alden.

10. Thomas Buchanan Read was called the "Painter Poet."

11. Oliver Wendell Holmes said "I would have a woman as true as death. At the first real lie which works from the heart outward, she should be tenderly chloroformed into a better world, where she can have an angel for a governess, and feed on strange fruits which shall make her all over again, even to her bones and marrow."

12. The eight general divisions of Poetry are:

1. Epic. Example—Milton's "Paradise Lost."
2. Dramatic. Comedy—Shakespeare's "As You Like It," Tragedy—Shakespeare's "Hamlet."
3. Lyric. Psalms, Hymns, Odes, Sonnets. Examples—Psalm 23; Tennyson's "Bugle Song"; Moore's "The Last Rose of Summer"; Lowell's "The First Snow-fall."
4. Eleagiatic. Gray's "Elegy."
5. Didactic. Bryant's "Thanatopsis."
6. Narrative and Descriptive. Longfellow's "Tales of a Wayside Inn."
7. Pastoral. Whittier's "Snow Bound."
8. Humorous. Cowper's "John Gilpin."

13. Washington Irving dedicated his "Sketch Book" to Sir Walter Scott.

14. Ralph Waldo Emerson said, in "Self-Reliance," "My life should be unique; it should be an alms, a battle, a conquest, a medicine."

15. "Tarryawhile" was the New England home of George W. Cable.

16. Rose Terry Cooke was the author of "Happy Dodd."

17. In 1764 the Literary Club was founded. Among its members were Samuel Johnson, Sir Joshua Reynolds, the great painter; Garrick, most famous of English actors; Burke, the orator; Gibbon, the historian; Sheridan and Goldsmith. They met once a week at the Turk's Head Tavern.

18. Samuel Johnson wrote "Slow rises worth by poverty depressed."

19. Thomas Chatterton was called the "Marvelous Boy."
20. "Betty Flanagan's Hotel," was an old building which James Fenimore Cooper made prominent in his book, "The Spy"; from this hotel Harvey Birch made his escape disguised in Betty's attire.
21. The "Lotus Club" was an organization of literary friends, and was located in the old Bradish Johnson mansion on Fifth Avenue, New York; prominent in the membership of this club were Farjeon, Sala, Steadman, Warner, Dr. Holmes, Bayard Taylor, Edwin Arnold and Marion Crawford.
22. The "Saturday Club" was a Boston organization, to which all of the famous New England writers of Holme's day belonged. Mrs. Fields tells us that throughout the forty years of this club's prime Dr. Holmes was not only the most brilliant talker of the assembly, but also the most faithful attendant. Other notable members were Agassiz, Lowell, Longfellow, Emerson, Hawthorne, Motley, Dana, Whipple, Dwight, Sumner, Dr. Howe and William Hunt.
23. Mrs. Samuel Hoar said of Thoreau, "He talks about Nature as if she had been born and brought up in Concord."
24. "Cedarcroft" was the Pennsylvania home of Bayard Taylor.
25. Dr. J. G. Holland was the author of the quotation:
Not many friends my life has made;
Few have I loved, and few are they
Who in my hand their hearts have laid;
And these were women. I am gray,
And never have I been betrayed."
26. "Clovernook" is famous for having been the home of the Cary sisters—Alice and Phoebe.
27. Joseph Addison was the author of "Cato."
28. Joseph Addison and Sir Richard Steele founded the "Spectator."
29. Alexander Pope was called "The Wicked Wasp of Twickenham."
30. Mary Campbell, "Highland Mary," was the sweetheart of Robert Burns. She died in 1786 and was buried in the kirk-yard of Greenock. To her memory Burns dedicated two of his

most beautiful poems—"To Mary in Heaven" and "Highland Mary."

31. Annie Laurie was born in the old manor-house of Maxwellton in 1682. She was immortalized in the poem "Annie Laurie," which was written by her lover, William Douglas of Fingland.

32. "Dove Cottage" was the home of Wordsworth and De Quincey; a little low-ceilinged house with tiny rooms, at the foot of a steep hill, overlooking Grasmere Lake, where 'plain living and high thinking' were seen at their best."

33. "Stoke Pogis Churchyard" is noted as being the supposed scene of Gray's famous "Elegy, written in a Country Churchyard."

34. Marion F. Crawford was the author of "Mr. Isaacs."

35. Northampton, Conn., was the scene of Henry Ward Beecher's "Norwood." J. G. Holland named this village the "Queen Village of the Meads."

36. The "Vale of Chester" is noted as the birthplace of Bayard Taylor. This place was referred to in a memorial poem written by Whittier after the death of Taylor:

O Vale of Chester! trod by him so oft,
Green as thy June turf keep his memory. Let
Nor wood, nor dell, nor storied stream forget,
Nor winds that blow round lonely Cedarcroft;
Let the home voices greet him in the far,
Strange land that holds him; let the messages
Of love pursue him o'er the chartless seas
And unmapped vastness of his unknown star!
Love's language, heard beyond the loud discourse
Of perishable fame, in every sphere
Itself interprets; and its utterance here
Somewhere in God's unfolding universe
Shall reach our traveller, softening the surprise
Of his rapt gaze on unfamiliar skies!

37. Cooleridge said of William Ellery Channing, "He has the love of wisdom, and the wisdom of love."

38. Horace Mann said, "I never dog-eared a book in my life, nor profanely scribbled upon the title pages, margin or fly-leaf,

and would as soon have stuck a pin through my flesh as through the pages of a book."

39. Edward Everett said, "Education is a better safeguard of liberty than a standing army."

40. Louisa M. Alcott served as an army nurse in Washington, D. C., in 1862-'63.

41. The grave of Louis Agassiz, in Mt. Auburn Cemetery, Cambridge, Mass., is marked by a boulder from the glacier of the Arr, and shaded by pine trees brought from Switzerland.

42. Amelia arr wrote "A Bow of Orange Ribbon."

43. "Riverby" is famous for being the home of the naturalist, John Burroughs. It is located on the Hudson river.

44. Samuel S. Cox, of Zanesville, Ohio, was called "Sunset Cox" from having written so often in praise of Ohio sunsets.

45. Margaret Deland was the originator of "Dr. Lavender"; he appears in "Old Chester Tales" and in "Dr. Lavender's People."

46. Joseph Rodman Drake and Fitz-Greene Halleck contributed a series of humorous poems to the New York Evening Post, under the signature of Croaker & Co., these poems were afterward known as the "Croaker Papers."

47. "Copse Hill" was the home of Paul Hamilton Hayne, and was located at Forest Station, Ga.

48. Helen Hunt Jackson was the author of "Romona."

49. George Eliot was the author of "Romola."

50. Ralph Waldo Emerson called himself the "incorrigible spouting Yankee."

51. Trinity Churchyard, New York City, is notable for the number of illustrious dead resting within its borders.

52. Sleepy Hollow Cemetery, Concord, Mass., is notable as being the last resting-place of Emerson, Hawthorne, the Alcotts, the Hoars, and many more of Concord's famous folk.

53. Oliver Goldsmith wrote "The Deserted Village."

54. "Edgewood" is noted as the home of "Ik Marvel," Donald G. Mitchell. He immortalized the place in his book "My Farm at Edgewood."

55. "Dryad's Green" was the home of George W. Cable.

56. "Bonnie-Castle" was the summer home of Dr. J. G. Holland. It was on Alexandria Bay.

57. Ben Johnson in "Cynthia's Revels" said:
"True happiness
Consists not in the multitude of friends,
But in the worth and choice."
58. Zona Gale is the author of "Friendship Village."
59. Christopher Marlowe was the author of "Doctor Faustus."
60. John Bunyan is said to have written his masterpiece, "Pilgrim's Progress," during his six months' imprisonment for non-observance of the laws forbidding the meeting of Non-conformist ministers and their followers in any public or private place, as an assembly.
61. Samuel Pepy's famous Diary has been termed the "most remarkable piece of minute self-revelation known to historians."
62. "Craigie House" is notable for having been the headquarters of George Washington, for a time during the Revolutionary War, also for having been the home of Henry Wadsworth Longfellow.
63. "Beechwood House" was one of the American homes of Rudyard Kipling.
64. Joseph Addison's favorite walk, was under the elms along the peaceful Cherwell in the grounds of Magdalen College; this charming pathway between the rows of stately trees is still known as "Addison's Walk."
65. Wordsworth, Southey and Coleridge were known as the "Lake Poets."
66. "Holland House" was the home of Joseph Addison; here he died June 17, 1719. It was located in Kensington, London.
67. Alexander Pope was the author of the words:
"While yet a child, nor yet a fool to fame,
I lisped in numbers, for the numbers came."
68. Laurence Sterne wrote the "Life and Opinions of Tristram Shandy."
69. Edith Wharton was the author of "The House of Mirth."
70. "Dryad's Green" was the home of George W. Cable.
71. William Cullen Bryant said, "On opening Wordsworth a thousand springs seemed to gush at once in my heart, and the face of Nature of a sudden to change into sudden freshness of life."

72. Oliver Wendell Holmes wrote "Old Ironsides," when but nineteen years of age, on the occasion of the threatened destruction by the government of the old frigate "Constitution." The poem so stirred the American people that the old ship was preserved.

73. William Cullen Bryant was called "The Founder of American Poetry."

74. Oliver Wendell Holmes wrote "The Guardian Angel."

75. Washington Irving wrote "The Alhambra."

76. Alfred Tennyson wrote "Crossing the Bar." This beautiful poem was set to music, and was sung at the funeral service of the author.

77. Elizabeth Barrett Browning was called "Shakespeare's Daughter" because of her remarkable genius.

78. Robert Browning wrote "Pippa Passes."

79. Jean Ingelow wrote the "Songs of Seven."

80. Thomas Babington Macaulay said, "An acre in Middlesex is better than a principality in Utopia."

81. Gad's Hill, England, was the home of Charles Dickens.

82. "George Eliot" was the pen-name under which Mary Ann Evans wrote her famous novels.

83. William Makepiece Thackeray wrote under the nom-de-plume of "The Fat Contributor."

84. Thomas Carlyle said, "The true university of these days is a collection of books."

85. Matthew Arnold was called "The Apostle of Culture."

86. Sir Walter Scott wrote "The Lay of the Last Minstrel."

87. James Rodman Drake wrote "The American Flag."

88. "Rydal Mount" was the English home of William Wordsworth.

89. Geoffrey Chaucer was the first of the illustrious poets to be buried in the "Poet's Corner" of Westminster Abbey.

90. Stratford is noted as the birthplace of William Shakespeare.

91. Ben Jonson in his day had a considerable number of literary followers who were banded together in a society known as "The Tribe of Ben," of these he was the supreme dictator, and reigned at the Devil Tavern, where their meetings were held, as the acknowledged head of English letters.

92. Francis Bacon said, "Virtue is like a rich stone, best plain set."
93. Dinah Maria Mulock Craik wrote "John Halifax, Gentleman."
94. J. M. Barrie wrote "The Little Minister."
95. Captain John Byron, father of George Gordon Byron was known as "Mad Jack" Byron.
96. Samuel Taylor Coleridge and Robert Southey married
97. Charles Lamb was called the "Genial Charles."
- sisters.
98. Thomas De Quincey wrote "The Confessions of an Opium Eater."
99. Thomas Hood wrote "The Bridge of Sighs."
100. On the gravestone marking the last resting-place of John Keats is inscribed the following: "Here lies one whose name was writ in water."

New Books

Advanced English Grammar. By William T. Harris. 511 pages. The World Book Company, Publishers, Yonkers, N. Y.

The Wide Awake Fourth Reader. By Clara Murray, with illustrations by Harry C. Edwards and Sarah F. Smith. 329 pages. Price 50 cents. Little, Brown & Co.

Twilight Town. By Mary Frances Blaisdell. Illustrated by Henrietta S. Adams. 173 pages. Price 40 cents. Little, Brown & Co.

Indian Child Life. By Charles A. Eastman. Illustrated by George Varian. 160 pages. Price 50 cents. Little, Brown & Co.

The Child's Book of American History. By Albert F. Blaisdell and Francis K. Ball, with illustrations by Frank T. Merrill. 218 pages. Price 50 cents. Little, Brown & Co.

Principles of Secondary Education. By Charles DeGarmo. Professor of the Science and Art of Education, Cornell University. 338 pages. Price \$1.25. The Macmillan Company.

The Four Wonders—Cotton, Wool, Linen, Silk. By Elnora E. Shilig, for ten years primary teacher in Columbia School, Seattle, Washington. Drawings by Charles Copeland. 137 pages. Rand, McNally & Co.

The Teaching of Geography in Elementary Schools. By Richard Elwood Dodge, professor of geography, Teachers' College, Columbia University, New York City, and Clara Barbara Kirchwey, instructor in geography in the Horace Mann School and Teachers' College, Columbia University, New York City. 248 pages. Rand, McNally & Co.

American Civics for the Seventh and Eighth School Years. By A. G. Fradenburgh, Ph.D., professor of history and politics, Adelphi College, Brooklyn, N. Y. Illustrated, 275 pages. Price 65c. Hinds, Noble & Eldredge, Publishers.

Standard Popular Songs. Edited by Baldwin & Newton. Paper edition. Price 10 cents. Ginn & Company, Publishers.

Lessons in Pedagogy

By Charles H. Davis, B. S.

MEDIEVAL EDUCATION.

Plan and Outline—Criticisms.

(a) Early Period—1—800 A. D.

The aim of Medieval Education was to prepare for future life. The character of the education was religious. The schools in existence were the catechism, catechetical, the monastic and the church. The Monastic orders were the Benedictines, the Franciscans, and the Dominicans. The Monks originated the Seven Liberal Arts. These were known as the Trivium and Quadrivium and were the subjects of study. Grammar, logic and rhetoric constituted the Trivium; music, arithmetic, geometry and astronomy were the Quadrivium. This made up a course of seven years, and with religion to complete the whole, were studied in the monasteries. St. Augustine was the most noted of this Church of Fathers. Augustine's Pedagogy was as follows:

- (1) All teaching is based on faith and authority.
- (2) All pagan literature must be excluded from the schools.
- (3) The chief subject in the school course is history, pursued in the narrative form.
- (4) Make abundant use of observation in instruction.
- (5) The teacher must be earnest and enthusiastic.

(b) Period of Charlemagne, 800—900 A. D.

Summary of the work of Charlemagne.

- (1) He elevated the clergy by demanding greater educational qualifications of them and by insisting that they do their duty.
- (2) He gave dignity to native tongues by requiring priests to preach in the vernacular of the people.
- (3) He opened the cloisters to the purposes of education, and thereby greatly extended their usefulness.
- (4) He sought to perpetuate religion, and insure the stability of his empire (Rome) by making education compulsory and universal.

- (5) He believed in the education of women,
- (6) He laid the foundations of future school systems, and indicated certain principles that are still recognized as valid.
- (7) He established schools, and himself set the example of study, working at Latin and Greek, rhetoric and astronomy. Alcuin of England was the instructor of Charlemagne, and has been called a "reviver of learning." He either founded or assisted by his zeal many of the now famous universities of France. He was the first minister of public instruction in France.

Alfred the Great in England urged education of the higher classes.

(c) Feudalism and Mohammedanism, 900—1200 A. D.

Criticism on Feudal Education.

- (1) It honored women and gave her the higher position afforded by any system during the Middle Ages.
- (2) It gave the world a splendid example of chivalry, teaching manliness, courage, devotion to the right.
- (3) It contributed to literature through the composition of the mimic singers.
- (4) It encouraged an active participation in life's affairs.
- (5) It restricted its advantages to the privileged class.
- (6) It lacked the elements of progress.
- (7) It despised intellectual training, while laying great stress on physical powers.

Mohammedanism.—Mohammedan education originated chemistry, developed the sciences, supported universities at Bagdad and Cordova, and stimulated a rival spirit that aided the rise of the universities.

(d) Crusades, Universities, Scholasticism, 1200—1500 A. D.

The Crusades were efforts by the European Christians to rescue the Holy Sepulchre in Jerusalem from the Mohammedans. The leaders were Peter the Hermit, Godfrey of Brouillon, Conrad III, Louis VII, Richard the Lion-Hearted, and Barbarossa.

Results of the Crusades:

- (1) They created a desire for travel and discovery.
- (2) They drew various nations together by one common purpose.

- (3) They increased the knowledge of the manners, customs, culture, products, and civilization of the East.
- (4) They stirred up commerce, especially of the Mediterranean, making Venice and Genoa great commercial centers.
- (5) They broke up the power of feudalism and feudal estates.
- (6) They widened the horizon of thought, and prepared the way for an intellectual and religious revival.
- (7) They emancipated philosophy from theology.
- (8) They were a reaction of laity against clergy.

The Universities.—The rise of the universities is traceable to the voluntary association of students for advanced study, to monastic and church schools and to the influence of the Saracenic universities at Bagdad, Cordova, Babylon and Alexandria. Salerno, Italy is said to be one of the earliest Christian universities, 1060 A. D., Paris, was the most noted of the Middle Ages; Abelard, a Benedictine monk, the most popular teacher there, laid foundations of Scholasticism. Other universities established during this period were Oxford and Cambridge in England; Prague, Heidelberg and Leipsic, in Germany; Vienna in Austria; Lund in Sweden; Christiania in Norway, and Copenhagen in Denmark. The four great faculties of instruction in these universities were Law, Medicine, Philosophy and Theology. The lecture method of teaching was used.

Scholasticism was an educational movement to reconcile philosophy and Christian doctrines. It existed from the ninth to the fifteenth centuries, reaching its climax in the eleventh and twelfth. Abelard was the greatest teacher; Thomas Aquinas, a Dominican, known as the Angelic Doctor, was the greatest writer; Duus Scotus, a Franciscan, was another noted writer. The schoolmen used the lecture method, interpreting and commenting upon the subject matter. They also used the syllogism which is a form of deductive reasoning in which a conclusion is drawn from two known premises. Major premise. All our Presidents must be citizens of the United States. Minor premise. Woodrow Wilson is our President. Conclusion. Therefore Woodrow Wilson is a citizen of the United States.

Summary of the benefits of Scholasticism.

- (1) It attempted to harmonize philosophy with Christianity.

(2) It sought to base learning on reason and investigation, rather than on authority.

(3) Many universities were established through the Scholastic influence, viz., Paris, Heidelberg, Bologna, Prague, and Vienna.

(4) It recognized the need of a universal language for schools and a universal church for man.

(5) Its direct work in education cannot be said to have been permanent, yet it imparted fresh vigor to educational endeavors.

(6) It introduced to the world the principle of the thinking spirit, and prepared the way for victory of this principle.

Monastic Education.

Summary of benefits conferred upon civilization by the Monasteries:

(1) They preserved classic literature, copied it with great industry and preserved it with care.

The archives of these institutions have yielded up some most remarkable and valuable manuscripts that otherwise would have been lost to the world.

(2) They kept alive the flickering flame of Christianity, by being the centre of religious interest and zeal.

(3) They maintained educational interest during the long, dark period, as they had the only schools of this time.

(4) They originated a great course of study by giving the world the seven liberal arts.

(5) They furnished places of refuge for the oppressed.

(The next article in the February number will deal with Methods of Teaching.)

QUESTIONS FOR REVIEW AND DISCUSSION.

Note.—Teachers will derive much more benefit from these questions if they form the habit of expressing their thoughts in writing.

1. Define education. Show that your answer includes harmonious development.

2. Mention the five inheritances given by Butler. (See definition of education in September number of *Educational Foundations*.)

3. Define complete living as understood by Spencer. Criticise Spencer's definition.

4. Name ten purposes or aims of education to be derived from the various definitions.

5. What is meant by Dewey's sociological view of education?

6. The Jesuits are criticised adversely for their use of emulation in school. Give arguments for and against it.

7. Who were the Christian Brothers? Mention three of their contributions to educational progress?

8. (a) Who founded the Jesuit order? (b) In what century? (c) Discuss their use of emulation, repetition, professional training of teachers, examinations, definite aim in education.

9. What method did Ascham use? Explain its use.

10. What was the aim of education in each of the five oriental nations?

11. Contrast Spartan and Athenian education.

12. What three classes of people are considered in Plato's Republic? What education should each class receive?

13. Name three of the Christian Fathers and state one important fact about each.

14. What studies were included in the Seven Liberal Arts?

15. Name three monastic orders. Give three of their contributions to educational progress.

16. Describe the education of a knight.

17. Outline the periods in medieval education, giving (a) the representative educator, (b) the methods or principles of teaching, and (c) the most important subjects taught.

18. Distinguish between "A System of Education," and "A Method of Education."

19. Which is the more important to the classroom teacher, the science or the art of education? Give reasons for your answer.

20. What is meant by many-sided interest in Education?

Educational Foundations Normal Reading and Study Course

Explanation

Suggestion

Read the statement of the United States Commissioner of Education:

"The total number of (Normal School) graduates, 18,278, was large enough to supply less than 25 per cent. of the demand for new teachers in the elementary schools of the country."

More than 75 per cent. of our teachers are compelled to take up the duties of their profession without professional training.

Not as a substitute for a normal school course, but as a help to those who aspire to better things, the following plan is offered:

1. Subscribe for and read carefully each month—Educational Foundations.

2. Buy or borrow as many of the books named in our Study Course as possible and begin to read them systematically; or,

3. Economize by organizing a Study Club and buy the necessary books from a common fund.

4. Begin at any time and finish when you can.

5. Set aside regularly for study a half hour, if possible, every day and two hours on holidays. When time is unavoidably lost, except from illness, try to make it up the next day.

6. Upon satisfactory evidence that the course has been completed, and after such examination as the editors may wish to conduct, a certificate will be given which it is believed will be of service in aiding the owner to secure a higher license and better position.

7. The editors will be glad to answer questions at any time or to render such help as may be required. Letters may be addressed to Charles H. Davis, Associate Editor. Write to us at least once a fortnight to tell us how you are progressing. Write as often as you wish.

8. No expense is to attach to this plan except the subscription price of Educational Foundations, the cost of the books purchased and a nominal charge for certificates, not to exceed 25c. If desired all books may be ordered through the publishers of Educational Foundations, 31-33 E. 27th St., N. Y. City.

List of Books for Reading and Study in the Educational Foundations Normal Course

Note.—The books starred are required, the other optional.

History and Principles of Education.

*Monroe—Brief Course in the History of Education.....	\$1.25
Painter—History of Education	1.20
Quick's—Educational Reformers	1.50
Spencer—Education	.38
Harris—Psychological Foundations	1.50
*Horne—Philosophy of Education	1.50
Butler—The Meaning of Education	1.00
*Bagley—The Educative Process	1.25
Colvin—The Learning Process	1.25
James—Psychology (Brief Course)	1.60
*James—Talks to Teachers	1.50
*Dewey—The School and Society	1.00
DeGarmo—Herbart and the Herbartians	1.00
Report of the Committee of Ten	.30
Report of the Committee of Fifteen.....	.30
Dexter and Garlich—Psychology in the Schoolroom.....	1.50
Yocum—Education, Culture and Democracy.....	1.25
Ruediger—Principles of Education	3.00
*Bolton—Principles of Education.....	3.00
Davidson—History of Education	1.00
Chancellor—A Theory of Motives, Ideals and Values, in Education	1.75

Methods of Teaching.

*Taylor—Principles and Methods of Teaching Reading...	.90
*Taylor—Composition in the Elementary School	.90
*McMurry—The Method of the Recitation	.90
*Walsh—Methods in Arithmetic	1.25
McMurry—Special Method in Arithmetic	.70
*Strayer—The Teaching Process	1.25
Meumann—The Psychology of Learning	2.00
Seeley—New School Management	1.25
Hinsdale—The Art of Study	1.00
Hamilton—The Recitation	1.25

Smith—The Teaching of Elementary Mathematics.....	\$1.00
*DeGarmo—Essential of Method	.65
Chubb—The Teaching of English	.72
Carpenter, Baker and Scott—Teaching of English.....	1.50
*Dexter and Garlick—A Primer of School Methods.....	.80
Redway—The New Basis of Geography	1.00
Mace—Method in History	1.00
Jones—Teaching Children to Study (The Group System Applied)	.80
*McMurry—How to Study and Teaching How to Study..	1.25

School Management.

*Shaw—School Hygiene	1.00
*Taylor—Class Management	.90
Perry—The Management of a City School	1.25
*Chancellor—Teaching and Management	1.00
Bagley—Class Room Management	1.25

REMARKS

The number of inquiries received concerning our Reading and Study Course assures us that the method adopted is meeting with considerable favor.

The publishers appreciate the book orders sent to this office. While no one is under obligation thus to favor us, we consider such orders as tokens of good will and seek to render satisfactory service.

The price of each book is now added to the name of the book in the list. A number have written for prices and others will no doubt be glad to have the information.

Education is life.

Educators are life savers.

Train for service.

Educational Foundations

VOL. XXV.

FEBRUARY, 1914

No. 6

The Necessary Book

The Montessori Method.

Scientific Pedagogy as Applied to Child Education in "The Children's Houses," with Additions and Revisions by the Author. By Maria Montessori. Translated from the Italian by Anne E. George. With an Introduction by Professor Henry W. Holmes of Harvard University. With Thirty-two Illustrations from Photographs. Second Edition. Frederick A. Stokes Company. May be ordered of the Educational Magazine Publishing Co., 31-33 East 27th Street. Price \$1.75. With Educational Foundations for one year, \$2.50.

It was at the suggestion of Professor Holmes that an English translation was made of Dr. Montessori's book. This suggestion the author believes to be one of the greatest events in her educational work. It may properly be considered, also, an event of great importance to the cause of education in English-speaking countries. Many of our readers are already familiar with Dr. Montessori's book and know something of the results of the experiments carried on in "The Children's Houses." The system is being so widely discussed and is destined to so conspicuous a place in the history of education that no one engaged in educational work can afford to affect indifference to it. A great volume of literature will be produced on the subject but Dr. Montessori's own book is the first authority to be consulted. A woman's name has been added to the roster of great educational theorists, and

whether we accept her theories or not that name will be passed on to succeeding generations as inevitably as the names of Pestalozzi, Rousseau and Froebel have come down to us. This much has been achieved to a certainty. American educators are under a two-fold obligation; first to seek to comprehend the meaning and the motives of the movement, second to determine its adaptability to the work of the American school.

An Opinion

By Grace C. Strachan

With reference to the Montessori system I would say that every educator approves the principles which characterize it, because they are the principles which underlie proper teaching—not only of kindergarten subjects to pupils of kindergarten grade, but the teaching of any subject to pupils of any grade. In that respect there is nothing new in the Montessori system. I believe that all good teachers have worked to a greater or less degree on the same lines.

I am very glad, however, to have these principles emphasized and made prominent, as they have been by the lectures and articles on the Montessori system, and especially by the appearance and talks of Mme. Montessori herself.

I believe that these principles are adaptable to the needs of our country. Their practicability, however, is involved to some extent by consideration of the larger number of pupils in kindergarten classes in our public schools. In New York, for instance, a kindergarten class may number fifty pupils—one teacher having full charge of said number, except for the assistance of a second teacher during an hour and a half per session of three hours.

Furthermore, the limited amount of space available for the use of these fifty kindergarten children is often inadequate for the carrying out of the independent and free work and play that Mme. Montessori found to be practicable with her smaller classes and larger work and play spaces.

The Montessori Method

An Exposition and Criticism

By S. A. Morgan, B.A. D.Paed.

[*Bulletin No. 1, of the Ontario (Canada) Department of Education, is devoted to a discussion of the Montessori system under the above caption. The author presents what seems to be a perfectly impartial survey of the subject elucidating Dr. Montessori's theories and offering his criticisms in a convincing manner. The following excerpts constituting but a small part of the monograph should help greatly in bringing the reader to a clear understanding of the meaning of the Montessori movement.*]

Summary of Principles of the Montessori Method.

1. *Man biologically considered is a distinct individual.*
2. *At birth man is circumscribed by the conditions of an opposing environment.*
3. *Man may obtain mastery over his environment through the exercise of the spontaneous activity with which he is biologically endowed.*
4. *Education is, therefore, to give free play to this spontaneous activity and thus develop the child into an independent individual.*
5. *The attaining of this independent life is conditional upon a physiological and mental development through direct contact with the physical world.*
6. *Education must, therefore, come through the child's own efforts directed toward a mastery of physical educative materials and not through the intervention of human instruction.*

Criticism.

1. *Man is by nature not a distinct individual but a member of a social community.*
2. *His physical environment has been largely interpreted by man from the standpoint of social needs and has, therefore, obtained a social value and meaning.*

3. *As a social individual, man must learn to adjust himself to all phases of his environment from the standpoint of their social significance.*

4. *In this process each individual must aim to realize in his own life the achievements of the race.*

5. *This realization can be obtained not as a result solely of direct experience, but largely through an active process of instruction.*

The Inception of the System.

IT WAS while acting as assistant doctor at the Psychiatric Clinic at the University of Rome that Dr. Montessori first became interested in the problem of education. Being called upon in connection with her official duties to visit the sick in the insane asylum, she thereby came in contact with idiot children and with the remedial efforts being put forth on their behalf. Through her interest in these children, her attention became centred upon the methods employed in the education of defectives and more particularly upon those formulated by Edward Séguin for the education of idiot children. As a result of her observations she came to the conclusion that their mental defects required pedagogical rather than medical treatment. Having been requested to expound her views in a course of lectures, she began a movement which led to the establishment of a State Orthophrenic (or Mind-straightening) School for very backward children, of which she was the directress for over two years. Later an institute was opened to which were admitted idiot children from the insane asylums; and, being anxious to demonstrate the truthfulness of her views, Dr. Montessori devoted herself to a study of the various methods employed in the education of defectives, and to the perfecting of her own methods and materials, instructing her teachers and applying and testing her system in the actual teaching of the children. As a result of her success, she became convinced that her own methods were more rational and effective than those employed in the ordinary Italian school, and that they could be applied to the education of normal children as well. She was, accordingly, seized with a desire to formulate her methods so that they might be applied in the education of the ordinary child, hoping thereby to revolutionize the methods of education in vogue in the Italian schools. Feeling the need of

further preparation for her task, she devoted herself for some time to the study of philosophy and experimental psychology, and to a careful investigation of the methods followed in the elementary schools of Italy.

When, as a result of these investigations, the pedagogical principles of her system began to take on more definite form, and the possibility of applying her method to the education of normal children became more evident, Dr. Montessori began to look for an opportunity to test her system with a class of such children. This opportunity was accidentally afforded her, when, in January, 1907, she was permitted to open an infant school in a model tenement house built by the Roman Association of Good Building in one of the most wretched districts of the city of Rome, the Quarter of San Lorenzo. This school was designated "The Children's House." Other "Children's Houses" were soon established; and, as a result of her experiments, Dr. Montessori has succeeded in formulating more definitely the principles and methods to which she attributes the success of her own teaching, almost all of which she affirms to be wanting in the practice of the ordinary school.

The Organization of the Children's Houses.

The development of the Montessori Method as a system of pedagogy has taken place so largely within the environment and through the practical work of the Children's House, that it will be necessary to a proper appreciation of the evolution of the system to describe briefly the general aim and organization of these "Houses." The Children's House is in reality a room in a tenement to which are admitted the children of the tenants between the ages of three and seven. Connected with each Children's House is a garden situated in the court-yard of the tenement and in direct communication with the school-room. The staff in charge of each Children's House consists of a caretaker, a physician to look after the health of the children, and a directress, who lives within the tenement and looks after their physical, mental, and moral development. The directress also consults with the parents concerning the welfare of each child and decides the programme and the hours of the Children's House, which, on account of the occupations of the parents, usually include the whole working day. As the cost of maintaining the Children's House is borne by the Association in charge of the tenement, the

parents of the children are at no expense, unless it be in an indirect way through the rents paid to the Association. To take advantage of the Children's House, however, the parents must undertake to send their children regularly, clean and properly clothed, to show proper respect to those in charge of the House, and to co-operate with them in the physical and moral education of the children. Failure on the part of either the parent or the child to pay due regard to these provisions leads to the expulsion of the child from the House.

From the above it is evident that, in two respects at least, the Children's House furnishes an ideal environment for the evolution of a pedagogical system.

First: The position of the school within the tenement occupied by the parents and the children is likely to set up a co-ordination between the home and the school, which, in some degree at least, educators have always felt necessary for the highest achievement in educational work, but which under ordinary circumstances is seldom adequately realized.

Secondly: Since the directress must live under the same roof with the families of which she is the intellectual leader, she is afforded an exceptional opportunity of observing the community life, and thus obtaining a social outlook that enables her to direct the educational efforts of the school to their highest aim—individual development and social regeneration.

On the other hand, it may be argued that the peculiar features relating to these Children's Houses, notably the relationship of the teacher and the parents, and the teacher ages of the pupils, make it unlikely that a universal system of education could be evolved out of their educational practices, and especially one that would be applicable to our more democratic conditions. It is no doubt unlikely that the experiences of the average Canadian home could, and it is even more undesirable that they should be made a subordinate adjunct of the school within the life of the very young child. The fuller and more natural life of the average Canadian home will, on the whole, furnish a more desirable environment for enriching the experiences of the child, at least between the ages of three and five, than would be furnished through the formal environment of the best of the Children's Houses. Nor does it seem likely that

the most skilful of directors will fulfil the duties of a mother for these very young children, or that our civic conception of compulsory education would ever allow children to be excluded, as under the Montessori system they may be excluded, from these necessary advantages on account of the faults of either their parents or themselves.

By some, it may be argued, further, that as life is progressive, the educative process must reflect this necessarily varying aspect, and that no methods and materials can lay claim to universal validity on the ground that they have been effective in such a limited application to children of the pre-school period. But on the other hand it must also be borne in mind that life is not made up of separate periods, each requiring a totally different pedagogical treatment. On the contrary, it displays throughout, both physically and mentally, a single process of growth, and such uniformity must accordingly, in part at least, manifest itself also in the process of education. Consequently, though a certain educational method has had but a very partial application, it must, if found really effective in promoting life development, contain some universal principle which awaits only the touch of genius to adapt it to other phases of the educative process. It is, therefore, reasonable to conclude from its claimed success that, notwithstanding its limitations, the Montessori Method may contain some message for our teachers. To ascertain this message is the main object of this treatise.

The Law of Liberty.

The fundamental law underlying the Montessori Method is designated by the author the Principle of Liberty, or the Principle of Free Activity. According to this law the child both lives and develops into the fulness of life through its own forces. In other words, child life is revealed only through free activity, and develops only through the spontaneous manifestation of its own energies. Education, therefore, as a means of awakening and developing life, must permit the "*free* natural manifestations of the child," must respect the "*first indications of individuality,*" must leave the child "*free to develop,*" and must "*avoid the arrest of spontaneous movements and the imposition of arbitrary tasks.*"

To many this principle will seem but an echo of the Froebelian Law of Self-Activity, and the two laws undoubtedly have much in

common. Froebel, for example, tells us that the child's mind "grows by self-revelation," that it is the life work of all "to unfold their essence," that education consists in leading man to a "free representation" of an inner law, which "demands and requires free self-activity." Again, he says that "education should be passive rather than prescriptive," otherwise, we shall lose the "free spontaneous representation" of the divine in man; and that "all interfering education must of necessity hinder and destroy." But notwithstanding the almost identical wording of the fundamental laws of the Froebelian and the Montessori systems, it will be found that these two laws differ widely in the viewpoint from which they were respectively conceived, and that this difference leads to differences in their educational application.

As a philosophic educator, Froebel formulated his Law of Self-Activity from the viewpoint of the idealistic philosophy of the nineteenth century. In this philosophy the universe is viewed as an orderly system, possessing unity through the pervading presence of an intelligent spirit. By virtue of this spiritual unity of the whole, each individual within the universe, and, therefore, each individual child, has within it, according to Froebel, a "divine effluence," "a formative and creative instinct" which constitutes its essence. And further, by virtue of this law of unity, the principle of life-unity within the child enables him to reveal within his own life the unity of the outer world. Life development, therefore, consists in revealing or realizing in our consciousness the unity of the outer world; that is, in coming to a practical knowledge of our physical and social environment, and in yielding a thoughtful submission to the eternal laws governing the same. Since, however, this knowledge is possible only on account of the inner principle of life-unity possessed by the individual, the development of the intelligent life must proceed as a growth of this inner principle; that is, from the free self-activity of the individual. As a guide to life development education must, therefore, call forth this inner free activity of the child, and cause him, through his own activity, to realize the unity or meaning of the universe and thus enter into the fulness of life.

While Froebel thus rests his Law of Self-Activity upon a philosophic basis, it is from a biological conception of life that Dr. Montessori, as a physician and a student of nineteenth century biology, evolves the fundamental law of her system. In her present

exposition of her method she has not indeed presented as explicitly as one would desire the connection between her conception of life and her pedagogical law of freedom; but in view of various statements throughout the work, her argument may be represented in the following form:

It is an accepted biological fact that life manifests itself only in individual form; in dealing with life, therefore, we must necessarily deal with *single* living individuals. Biology teaches us, further, that the life of the individual is progressive, and is destined to expand and develop itself within the limits set upon it by heredity. This progression is, however, occasioned, not by external conditions, but by virtue of the nature of life itself. In other words, there is implanted within the individual, as an interior force or activity, a biological tendency which constitutes the true origin of its development. It is, moreover, through the free spontaneous manifestation of this inner life-force, that life progresses to a realization of its true destiny.

As a single living individual, however, man stands at birth in a position of physical and mental inferiority, being shut in by an opposing environment. This opposing environment includes both his own body, whose movements are not yet co-ordinated, and the physical and social bonds of an exterior world. But by the spontaneous exercise of this inner force which distinguishes him as an individual the child is able to *grow* both physically and mentally, and thus free himself from the bonds placed upon him by his physical and social environments. Education, therefore, must call forth these inner tendencies, and thus lead the child to overcome the external forces of his environment.

As a result of the foregoing biological law, man, it is claimed, is enabled through the exercise of his inner life force to progress toward a state of actual freedom or *Independence*. For, through the satisfying of this inner law of free activity he spontaneously develops himself both as a physical and as an intelligent individual, and thus obtains a mastery over the environing and circumscribing forces. In this way, the child advances to the attainment of the ideal life, namely, a life of perfect freedom and independence in which he shall be able of himself "to achieve the satisfaction of his own individual aims and desires." So long, for example, as the child must be fed and dressed by others he is living an imperfect

life of servitude; but as he proceeds, being impelled by the need for self-development, to master the physical and intellectual conditions for feeding and dressing himself, to that extent he becomes a free and independent, and therefore a perfect individual.

This conception of the perfect life as a state of freedom and independence, and of the imperfect life as one of accepted service and dependence upon our surroundings, is especially emphasized by Dr. Montessori, and forms the key to much of her educational methods and materials. She says, for example:

"Little children from the day they are weaned are making their way toward independence."

"Any one that believes that it is an advantage for a man to be served by man admits servility as an instinct."

"He who is served is limited in his independence."

"The man who, through his own efforts, is able to perform all the actions necessary to his comfort and development in life conquers himself, and in so doing multiplies his abilities and perfects himself as an individual."

"We must make of the future generation powerful men, and by that we mean men who are independent and free."

"I do not wish to be served because I am not an impotent."

But this theory of the perfect life as one of freedom and independence, reflects the doctrine of eighteenth century individualism, which erred in maintaining that man is by nature a distinct and separate individual, having an existence and destiny quite independent of others. And although Dr. Montessori herself, indeed, states that man is also social, nevertheless the conception of life which underlies the foregoing doctrine of freedom and independence, will, on account of its strong biological bias, be found, in two respects at least, to be philosophically unsound.

First: When Dr. Montessori asserts that "There exists only *one* real biological manifestation, the living individual, and toward *single* individuals, *one by one* observed education must direct itself"; and then further states that the perfect life is one in which the individual "shall be able of *himself* to achieve the satisfaction of his *own individual aims and desires*," and also that "social man is a natural man *yoked* to society," she seems, without question, to be making the individual the complete unit of life and of educational effort. To this conception of life, upon which her system is so largely based, objection must necessarily be taken. In a true conception of life, not the individual but the family must be taken as the or-

ganic unit. It is upon the family that the individual is by nature dependent, first for his physical existence, and secondly, for the physiological habits, the inherited instincts and tendencies, and the opportunities which make possible his future development. The perfect family life, moreover, does not imply on the part of its members a life of independence in which each individual member seeks to attain his own aims and desires; it rather implies a life of mutual service. Dr. Montessori, on the other hand, emphasizes the teaching of movements that are valuable in performing the ordinary acts and duties of life in order that the child may be independent, or no longer "yoked to society." But surely these exercises should be viewed as valuable, not because they will make the child independent of his home relations, but because the acquired ability will make him more efficient to co-operate in the work of the home. The Great Teacher himself does not say that a man shall forsake father and mother to become a free and independent individual, but rather to co-operate in the formation of an independent home, and this, we maintain, constitutes the true unit of society. Consequently, true service implies not any limitation of life development or inferiority on the part of either member connected with an act of service, but rather a subordination of individual aims and desires to the promotion of the good of a larger organism, the social whole. Under no other conception of service would it be possible to accept division of labor as a mark of social and individual progress. The acceptance of social service, therefore, under normal social conditions is not to be viewed as a form of servitude, nor is a social man to be viewed as "a natural man yoked to society."

Secondly: Neither can we accept as a basic truth that phase of the principle of independence which affirms that life progresses by "overthrowing the obstacles which environment places in the way of its triumph." The doctrine of an opposition between the individual and his environment arose, in part, no doubt, from the author's application of her observations of defectives to an explanation of the law of development in normal life; for since the limitations in the intelligent life of defectives are occasioned by physiological defects in the organism, such, for example, as deafness, nearsightedness, etc., the work of their education consists in devising ways and means by which such defects are to be overcome. If,

accordingly, the body is viewed as a phase of our environment, the development of such a defective may in a sense be said to depend upon his ability to overcome the obstructions which his bodily environment "places in the way of his triumph"; but it would be philosophically unsound to apply this analogy to the lives of normal children and more general conditions of environment. The ordinary child is circumscribed not by his environment, but by the physical, physiological, and mental ignorance, which necessarily accompanies the early manifestation of the potentially social life which exists in every individual. Moreover, the perfection of this potentially social individual is possible only because his environment may be interpreted from a social and, therefore, from a beneficent standpoint, and thus render explicit the social tendencies within his own nature.

To appreciate the beneficent relation existing between the individual and his environment, it is only necessary to notice the attitude of the young child toward various objects within his physical environment, which attitude might be termed the Law of Social Interpretation. As the child stands face to face with a strange object, almost his whole attentive effort seems directed to a discovery of its motive or social significance. He is, for example, most actively interested not in the mere sight and touch of the broom, but rather in the motive or social significance of the broom as the *sweeping* thing, the fact which indicates its relation to social life. So, too, although he apprehends them through the senses, he is most directly attracted to the horse as the *driving* or *drawing* thing, to the pencil as the *marking* thing, and to the hammer as the *pounding* thing, all of which features represent the motive or social significance of the objects. Hence, man is perfected not by an arbitrary mastery over the forces of an opposing environment, but rather by the adequate interpretation, in accordance with his social tendencies and instincts, of the social and, therefore, beneficent aspects of his environment.

In spite, however, of her defective application of the basic principle of Liberty and Independence, one feature of that law has led Dr. Montessori to place due stress upon an important and too often neglected phase of educational work. An analysis of the process of social interpretation by which a child masters the social motive or significance of his environment shows us, first, that he

observes these objects in order to discover the social motive; and, secondly, that he discovers this social motive in order to participate in social action, or to engage in mutual social service, this active participation in turn giving a fuller meaning to the social significance of the object. It is from this latter fact that the true nature of free activity is, in part at least, to be explained. Education, therefore, as a process of leading the child into the fulness of social life, must especially keep his attention fixed upon the second phase of this process, and labor not merely to assist in the acquisition of social knowledge but also in the acquisition of social skill. This implies as a corollary that education should assist the child to interpret theoretically, or by observation, only in order to have him live these observations in his action. But too often the work of education is inclined to make the mere acquisition of knowledge the complete process, in the expectation that thereby the individual will be perfected. The extreme emphasis placed by Dr. Montessori upon independence of action has led in her educational practice, as we shall see later, to a certain emphasis being placed upon the expressive side of the learning process. Moreover, the biological bias underlying her conception of individual freedom has caused her to emphasize strongly the development of certain individual powers, as, for example, sense discriminations. Valuable, however, as these powers are in themselves, a development of such expressive skill in all phases of life purely from the standpoint of individual freedom and independence, and an ability to satisfy our own individual aims and desires, cannot be accepted as the legitimate object of a rational system of education. Such a conception would ultimately lead to a deification of the principle of competition and the acceptance of the doctrine of the survival of the fittest as a law of morality.

The Montessori Method

As Used in Combination with Other Methods, and as Taught in a
Little Country Town

By Drusie P. Brisby

MUCH has been written concerning the Montessori Method as taught by trained Montessori teachers and as to how the Montessori principle may be used by mothers at home, but practically nothing has been written in regard to how this Montessori idea may be used by primary teachers who have not the Montessori training. We are not all trained Montessori teachers, and in many cases we have a system of teaching to which we must rigidly adhere, and therefore, I think that perhaps the readers of the Educational Foundations might be interested to know that the Montessori Method can be, and has been, used in combination with other methods in primary education with remarkable results.

I am deeply interested in anything connected with the Montessori Method, and I feel that it is a question that every mother and all primary teachers should investigate. Scientists tell us that it is not in the power of one generation to form a complete plan of education. This is specially true in primary education, and I think we should consider the Montessori Method as a rounding out of a more complete system in primary work.

And considering the question from a practical standpoint, I cannot see why one or two of the senses are trained to the exclusion of the others. Comenius says, "Let everything be presented through the senses." If it is a proven fact that the child grasps knowledge more quickly and with greater ease by educating the sense of touch, then why neglect this sense? It is a notable fact that the sense of touch is very keen in early childhood, but after a few years of neglect it becomes dulled.

Some one has said that the teacher will use the best that any good method has to offer, making for himself an elective method, and breathing into it the breath of his own life. I think this is indeed true, and since my first year as a primary teacher, I have tried to follow out this idea, but I have always felt the need of

some unusual stimulus, even when the progress made was most flattering.

For seven years I have been teaching Primary work—for the same length of time I have had the same position in a graded public school. As a primary teacher I have felt a growing discontent with methods both old and new, which continued to grow with each succeeding year, until I felt that although I was considered a successful teacher, yet I was not.

Often I have thought of this, and have always been beaten, or forced as it were, against a huge wall, over which I could not see, or advance one step farther than the old routine.

But just at the time I felt "bluest," I happened to come into the possession of a little pamphlet dealing with the Montessori Method, and at about this time an article in the magazine appeared, dealing with the same. I eagerly read and re-read these; I felt that at last I had found the method. But I knew that it would be impossible to introduce it into the school last year, since I had not known of this, as fully as it was explained in these articles until a few weeks before school began in September.

So I continued my work last year along the same lines, knowing that without the necessary apparatus I could do nothing. But after school closed, during the summer I had much time for studying and planning. My interest in the Montessori idea increased to positive enthusiasm, so I determined that I would bring into my system of teaching, the Montessori Method as best I could.

But many questions came to my mind, such as: Have I the right to investigate this question? Have I the right to experiment, using as subjects, children whose parents expect them to be trained according to a certain prescribed system? Also, have I the right to do this without the consent of the Board of Education? It was suggested that I present to the Board, who are usually very generous in supplying the needs of the school, the new method and get their help in this new venture.

But I could not bring myself to do this, for I felt that this new idea demanded much caution, since the people in a small town are not favorably impressed with anything but the old idea of teaching. So it seemed to me that this was a little secret that I must keep. And I felt much as a mother would feel, jealous for the good of her child, for it seemed to me that this was a child of my

own imagination, since Montessori, with her mother schools, was so far away, and the Houses of Childhood so very few in our own country.

But we are convinced only through experiment, so I knew that it would be necessary for me to follow my old method of teaching, to an extent in connection with this, so that in case of failure the child would yet receive some instruction in "The Three R's."

In fact, the principal of our school, who is strongly in sympathy with the idea, encouraged me greatly, and advised that I mix the Montessori Method with the old-fashioned education, and from every view of the case, since we have not the special training, nor all the apparatus necessary, I consider this much the best idea.

So, in planning my work, I knew that it would be necessary for me to make, or have made, the necessary apparatus, and also, I knew that it was almost impossible for me to carry out the idea as Dr. Montessori describes it, since I could not have all the necessary apparatus, had no special training for the work, but got my inspiration merely from the books I had read on the subject, and from the comparison between it and my knowledge of other methods, and from the realization of the fact that it was a wonderful thing for the child.

So I planned to have only the things that I thought would help me most, sandpaper script letters, sandpaper numbers, the geometrical insets, the counting sticks that form the broad stair, and the buttoning frames. My next step was to make the necessary apparatus. In the catalogue exact dimensions are given. I made twelve each, of the two kinds of buttoning frames, the frames to be buttoned with the fingers, and the ones with which shoe-buttoners are used.

I will not say that these are easily made, for it is quite a task when one must measure, saw and hammer, and I will confess here that it is a very difficult thing to saw straight, and also to hit the nail on the head. Often the fingers suffer. And the buttonholes—My! I thought I would never get through! But I succeeded in getting my frames made, and ready for use a few days before school commenced.

Also the geometrical sets were completed, seven sets of them, consisting of six forms each.

The next step was arranging a program, wherein I might bring in my Montessori work, in connection with the old-fashioned mode of education. From the first I knew that I could not permit the large grants of liberty which Dr. Montessori advocates, and which is such a delightful feature of the work, but a feature nevertheless, that to an extent I would have to eliminate. So I arranged to have my regular lessons. But for busy work sometimes the class not reciting were given the buttoning-frames, sometimes the geometrical insets, the tops of which were to be fitted into these forms. This trains not only the sense of touch, but the muscles, and also gives an idea of form, while at the same time it keeps the child delightfully employed. For the first few days their writing lesson consisted only of drawing an outline of the geometrical insets, with their pencils, then filling these in with parallel lines, afterward going over the pencil lines with the colored crayons; they usually use some color or colors that I suggest. Often they select their own colors. And now since they are able to write I use this as busy work. This work also trains the child's sense of color, and teaches him to choose colors that blend. Often in outlining and filling in the geometrical insets they make, for instance, one line yellow and one line black. Thus it trains the eye in the selection of colors, and the muscles of the hand in outlining and filling in.

The "Wonderful Explosion" into writing that is a principal feature of the Montessori work, I consider that I have had, not the ability to write from the printed page, but the ability to easily and seemingly unconsciously form written words. I consider this remarkable, since from the first I have had to assist very few in the forming of letters. I attribute this to the fact that their muscles had been trained by the previous use of geometrical insets. Also often when there was any hesitancy in forming a letter I gave them a sandpaper letter to trace or "feel." This, of course, gave them a better conception of the shape of the letter, they had already perceived, and the muscles of the hand were already trained to make a visible outline of the MEMORY LETTER. And too, I think the ability to feel the letter acts as a wonderful stimulus. Every day I have had as regular class work, a lesson in tracing or "feeling" with their fingers, a sandpaper letter. I consider their ability to form letters so quickly, as wonderful, since always heretofore, there have been weeks of patient struggling in order to get the correct

form of the letter, then one day, as it were, the explosion came, they were able to form a letter, the muscles had been trained up to the point where it made it possible. I do not mean to say that it has not taken many days ere this for all my pupils to become able to write, but I do know that after following this method, all have grasped it with perfect ease.

Also: the counting sticks which make the "broad stair" (I did not follow out exactly the Montessori idea), for my counting sticks were made from BROOM STICKS. These "sticks" were painted white, divided into equal parts; for instance, the longest stick was divided into ten equal parts, each part an inch long. I painted every other section red; thus the different parts red and white. Then the ninth stick was an inch shorter and so on until the stick that represented ONE, which was an inch long. I made ten sets of these, also the sandpaper number cards to go with the sticks.

But the things that have helped me most are the sandpaper letters and words.

The Jansenists, who gave to the world, the phonic system of spelling, also laid great stress on the training of the senses as a means of educating the child. One of their maxims was, "The intelligence of childhood always being dependent on the senses, we must, as far as possible, address our instruction to the senses, and cause it to reach the mind not only through hearing, but also through seeing." Thus we see that the idea of sense training in the fifteenth century was not fully developed, and it has taken these many centuries to make more complete the ideas of educators of other ages.

Rabelais has personified two contrasting methods of education, that which by mechanical exercises of memory enfeebles and dulls the intellect, and that which by large grants of liberty develops intelligence and frank and open characters. Basedow says that both Lucretius and Rabelais, at an interval of fifteen hundred years, anticipated the nineteenth century in its restless discontent of old beliefs, its fearless questioning, its advocacy of scientific research. In full sympathy with these educators of old, I realize that their idea of proper ways in which children should get their first glimpse into the world of books was wonderful, but every age adds something new; sometimes it is weighed in the balance and found wanting, but with the wonderful Montessori Method, teach it, as out-

lined by its discoverer, or where that is impossible, bring it into your system of teaching as a stimulus to the mind, and a training for the muscles, and I am very sure it will not be found lacking.

In my reading lessons, I used the sandpaper words, also as an aid in writing. I usually outlined the day before the lesson I intended to have the next day. I made sandpaper words consisting of the words in the lesson. In teaching reading I use the word or sentence method, sometimes a combination of both. In using the sandpaper words I blindfolded each child and had him trace with his fingers each letter that helped to form the word. Then I told him the name of the word, and had the child repeat it, later we sounded the words as we traced them. In reading a sentence, if the child hesitated or failed to know a word, he was given the sandpaper word to trace, and tell the name, sometimes it was necessary for him to go over this many times. Often I would pass sandpaper words to the class, have them trace them with their fingers, and when they felt sure that they knew the word, stand before the class and tell the name of the word. This proved extremely helpful, and it was quite interesting to watch a class busily tracing, then without being called upon, stand and hold the card before the class, and correctly and without hesitancy, tell the name of the word.

I have found that by using these sandpaper words, in combination with our old methods, it has taken just half the time that it usually takes to get them ready for their primers, (our school law requires six weeks' teaching from the board), and I have never before had pupils as thoroughly prepared, not even in twice or three times the length of time, so I consider THAT an experiment tested and proven. The knowledge of "learning how" to read, has come so easily and quickly that it has been merely a little game. They unconsciously learned to read before they knew it, since they were drilled in the recognition of words, through the eye and under the stimulus of "touch" they get the conception of the written form, as meaning the same thing as something they have seen, heard or felt.

I also had as regular class work, a lesson in "feeling" the letters which form some word. It was impossible for us to trace more than one word. They traced each letter three times, each time call-

ing its name. We would take the letters out of their natural order, then after each had been "felt" the required number of times, I would place them in their correct order. They would then name the letters as they came, then correctly spell the word without the aid of letters. Thus they retained the memory of the word "felt." Also it is very reasonable to suppose that they learn the letters that compose the words they recognize, and learn to spell: since each letter is different, their fingers go through all the little turns and twists, each of these impresses the child differently, for each causes a different sensation, therefore they recognize the different names, since all leave a different impression on the mind. Just as, for instance, different people whom we know; we are first attracted by the facial features of the person, then some particular mannerism distinctly impresses us, then we are usually anxious to know who the person is, or, in other words, the name.

Also, I have found that the buttoning frames make excellent "busy work." While it serves to keep the children busy, it also trains the fingers and makes them more capable of doing, both for themselves and others, and too, it is a game. The children are attracted by the many round buttons, the many holes which are made especially to fit over each button; also a sense of curiosity prompts them to make the experiment. After a few times it becomes easier. Then it will not be long until the child makes the attempt to "do" for himself.

While one class is reciting, I often "blindfold" those left at their seats, and give them for busy work the geometrical frames, the tops of which are to be fitted in by "feeling" or "touch" alone. It is very interesting to watch them, often amusing. A little fellow, whom I had neglected to blindfold, happened to attract my attention while I was busily engaged in explaining work to another class. It was such a manifestly hard thing for him to keep his eyes closed while his fingers kept traveling round the insets; he wrinkled his face and squinted his eyes tightly together, yet around his mouth a glimmer of pleasure was apparent, but he was so intensely in earnest that he persisted in keeping his eyes closed until he fitted the tops into the insets. Then he opened his eyes, took the tops out, and commenced again.

And too much cannot be said concerning the physical develop-

ment of the child. A perfect childhood is every child's rightful heritage. And without perfect physical development, the child misses much of his birthright. He cannot participate in the rough and tumble games that sturdier children delight in, unless his muscles are perfectly trained. Therefore, let him run, jump, and test his strength, thereby acquiring judgment of the forces within him. And the Montessori plan for a better developed body offers all that is simple and practical. This apparatus appeals to the child, for it is but the means whereby he may develop his body, through those powers that call for a recognition of their being.

But every teacher cannot have the gymnastic apparatus, but we each can make a study of the child, and the things that delight the child, and help him to make his body more perfect.

We have none of the apparatus for the physical training of the child, but after every lesson or at least four times a day, I permit them to run around the room twice, then form in line and quietly take their seats. As an experiment, I pulled out a little bench, perhaps a foot high, for them to jump over in their running game. Now this is their chief delight, and they do not consider the game complete unless they are allowed to jump.

Also, they often walk the line. I usually draw a line on the floor with crayon, often the circles that Dr. Montessori advocates. They walk these lines balancing themselves with each step; sometimes they make the attempt to run and hop. All these games they enjoy thoroughly.

Whatever the child is forced to do without interest dissipates energy; thus, in order to attract, stimulate and awaken, as it were, the intellect of these little folk who are under our care, it is necessary for us to have devices that are interesting and practical, things that require the child "to do," for we learn "to do" by "doing," and the Montessori Method offers all these. If we cannot follow out Dr. Montessori's ideas exactly, we can, by giving much thought to this new method, work out a plan whereby we may bring in some of her principles, and make what variable applications of them, as are suited and applicable to our different environments.

Montessori and Modern Educational Problems

Lecture, given before the "German Social-Scientific Society of New York," at the Hotel Majestic, January 22, by Dr. Maximilian P. E. Groszmann, Educational Director of the "National Association for the Study and Education of Exceptional Children." Associate Editor Educational Foundations.

WE LIVE in the age of the child. The study of children and of their needs for health and education has become so general that it has extended far beyond the professional discussion and is cultivated by intelligent men and women of all classes.

The slow decline of healthy family life in this country is the natural result of causes which have given us the crowded tenements and the family hotels. This deplorable development has thrown increasing responsibility upon the schools which had to make good the defects of home education. The school problem, on the other hand, has become exceedingly complex through our immigration conditions. Immigration has not only increased the population beyond natural rates of growth, so that the demands made for buildings, equipment and teachers were multiplied at enormous speed; but it has introduced into our school population, racial and culture differences which made the school work very difficult.

For these and other reasons, ready-made systems, which look as if they could be used by teachers without apparently much preparation, have often been welcomed as a substitute for proper training. The latest "system" of this kind is the "Montessori System," which has been employed by some to antagonize the kindergarten while others have called it simply a modification of the kindergarten.

A consideration of the enormous influence which German pedagogical thought and practice has had in this country gives us the ability to judge better of the merits of the new claims.

Montessori is not the unusual and unique genius which her overzealous admirers want to make us believe she is. We must decline to recognize her as the creator of a new educational thought or system, or as a pathfinder in pedagogy. She is a clever practical teacher, of a charming and magnetic personality. She has excellent

physiological and anthropological knowledge, and is well schooled as a medical psychologist. She has read much and has the ability to collect, to organize and to develop didactically existing ideas and methods of instruction. Thus she has done a valuable work, which can be gratefully appreciated and which has given rich material to teachers and educators. She has given us a new opportunity and a new inspiration. But her system—which is essentially eclectic—is defective because it is one-sided and incomplete. It disregards vital elements in the mental growth of young children, such as the imagination, the dramatic instinct, the poetic sense, etc.

That her system has been discussed so widely, and not only by teachers, is due to the fact that the problems of education have now been recognized by all intelligent people as fundamental for all social and civilizatory progress. Many of the failures, of the moral derelicts, of the dissatisfied and dangerous elements of society might have been saved if they had had proper recognition and guidance in childhood. We must begin to do away with the awful waste of human souls which is characteristic of our imperfect school systems. School education fails to reach the individual and his or her special needs.

Our school systems must abolish their rigid grade work and the traditional lock-step; we must have manual training schools, forest schools, agricultural schools, open air schools, not only for a few select, or for only the sick, or for the older boys and girls, but as integral parts of our elementary education. We must have vocational differentiation and vocational guidance. We must learn to understand that parenthood is as serious a profession as that of the teacher or physician. Altogether we must have a new inspiration and a new light to build up a healthier and happier nation of the future.

But while the Montessori discussion has been stimulating, her so-called "system" is neither original nor complete and will not solve the problem. It is valuable only as offering interesting, methodical suggestions such as have been offered by other experienced and wise teachers.

Quotations

WE MAY liken the child to a clock, and may say that with the old-time way it is very much as if we were to hold the wheels of the clock quiet and move the hands about the clock face with our fingers. The hands will continue to circle the dial just so long as we apply through our fingers, the necessary motor force. Even so, is it with that sort of culture which is limited to the work which the teacher does with the child. The new method, instead, may be compared to the process of winding, which sets the entire mechanism in motion.

THE MONTESSORI METHOD.

Page 229.

We have been mistaken in thinking that the natural education of children should be purely physical; the soul too has its nature, which it was intended to perfect in the spiritual life—the dominating power of human existence throughout all time. Our methods take into consideration the spontaneous psychic development of the child, and help this in ways that observation and experience have shown us to be wise.

THE MONTESSORI METHOD.

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The greatest triumph of our educational method should be this:
To bring about the spontaneous progress of the child.

DR. MONTESSORI.

"Most teachers, who have adopted the Montessori system, are ignorant of the principles of education which Montessori laid down. They seek to apply the didactic apparatus with little or no idea of the underlying principles. Consequently the result is not a success, and both the teachers and the children are victimized.

"It is impossible to apply the Montessori system in a Froebelian kindergarten. The Montessori system is teeming with suggestions and ideas which will make over the kindergarten, and it is time the kindergarten faced the issue squarely."

CLARA E. CRAIG,

Rhode Island State Normal School.

A Review of Representative Genetic Studies of Number

By Henry B. Howell, Principal P. S. 27, Jersey City, N. J.

II. Children

ALL WILL agree, perhaps, that progress beyond mere rudimentary quantitative discrimination depends upon *the ability to count*. There seems to be little difference of opinion concerning this among observers, experimenters, psychologists and philosophers (Lay, Meumann, Phillips, Messenger, Dewey). However intensive and instantaneous the apprehension of number may seem to the mature mind, psycho-genetic analysis shows it to be generated by slow degrees through counting. The child, then, must and does count. Does the child count spontaneously, instinctively, or must he await the development of a power, however low, of abstraction and generalization?

This problem has been quite thoroughly investigated by Phillips.¹ He experimented on kindergarten children, consulted primary teachers, and collected data from 616 persons by means of a questionnaire 235 men, 319 women, 62 neutral; 72 per cent of these teachers, 40 per cent having taught over five years.

Phillips found the following facts which called for interpretation:

Children, before they have learned the number names, are observed to follow a succession of stimuli or to create a succession long before there is any conscious idea of number. They will repeat a series of sounds, as the strokes of the clock, throw down a given number of blocks time and again. A boy under two rolled one after the other ten mud balls down an incline marking one each time until each contained a little cross. Tallying with the fingers or toes, nodding the head, rhythmical articulations of various sorts, etc., are characteristic responses in this stage.

Having learned the number names as a series of auditory sym-

(1) D. E. Phillips. Number and its Applications. Ped. Sem. v, 1897-98, 221-281, 290-298.

bols mechanically associated with one another (this he does very soon through imitation before he learns to read or to write) he uses them indiscriminately and without reference to objects of any kind. Thirty-three out of thirty-nine children in a kindergarten counted without reference to objects. Primary teachers consulted, say that for some time children count in this manner and if an attempt is made to apply the counting, the series of names constantly tends to run far ahead of the objects. Most children are found to learn the names independently of the objects. "I placed before little Willie little sticks and told him to touch each stick as he counted; he was just as apt to say *six* or any other number when he touched *three* as to say it correctly."¹ Children show a passion for counting. They eagerly seek the names, catch them readily and use them delightedly. They will use the few names they know at first, repeating them over and over again, for a series of indefinite length. They recognize three or four objects at first as individuals, calling the fourth one four even when set aside by itself. They change the order of the number-names, the particular articulatory response being often a matter of indifference in such cases as elsewhere in their counting. To sum up negatively these results in a word—embryonic counting is not a response to outer stimuli—it is not the result of the observation of sensible things. The positive correlate to this is—counting at first is a motor response to an *inner* series. But, what is the nature of this inner series and how is it established?

Phillips says that it is a consciousness of succession that has resulted from a long experience of successions in consciousness. Moreover, the changes are naïvely rhythmical. This rhythmical subjectivity is an ultimate fact, a possession common to all though not the same in all. Our minds are attuned to rhythmical responses but they do not all play the same tune. Experiments performed upon the rhythmical sense show an indifference point, a length of interval between the beats of a metronome say more easily and accurately judged than any other above or below, but it varies with individual and with the different senses. Series of metronome beats tend to group themselves into rhythmic multiples. This is a matter of common experience in listening to the tick of a clock.

(1) Phillips, page 232.

Children inquire why some ticks are longer than others. This synchronization, as I understand it, is a category of the subjective ordering of experiences, which we cannot help if we would. The experiences themselves begin at birth. Some of these are rhythmical *per se* and may serve at times as symbols for an internal rhythm, as the pulse, respiration, walking, etc. Changes in consciousness are continually taking place, produced by the varying impressions from all the senses. The earliest and most rudimentary form of knowledge is a knowledge of a series of changes. "All the experimental work substantiates James's thought that number is primarily strokes of attention." "The tactile sense very early produces an endless series of changes in consciousness which soon become vaguely recognized as distinct, both in time and space. Sound continually plays its part after the first few hours of life; random noises, voices, ticking and striking of the clock, all contribute to the formation of the *series-idea*."¹ All the rhythms and the recurrences of life tend to establish (1) the fact of succession, (2) the idea of succession. Prof. Dewey says that changes in consciousness and consciousness of change (from the latter of which, according to our hypothesis, the idea of number originates) are not the same. Granted; but from what is the latter derived if not from the former?

Changes of consciousness, then, pass over into consciousness of change and the series-idea is thus established. As thus established it is abstract, a potentiality of number rather than a numbering process, a category according to which concrete things tend to express themselves. In other words, touches, sounds, visions, clock strokes, counters of various (last word) sorts, are the concrete *symbols* of an inner abstract series, seeking expression in these ways in the absence of a more sophisticated symbolism. These at first may be highly particularized, the concreting being limited in the case of any individual, but later becomes a general idea expressible by any series of successions. The thing to be noted here is that in this stage objects are symbols. The group of objects is used in the place of a name. This symbolization is in advance of the power to name and enables an early vague concept in

(1) Phillips, page 228.

children and as we have seen in savages to grow without the aid of a mathematical vocabulary.

Here ontogeny and phylogeny are in accord. But the child in his individual development is at an immense advantage over his savage ancestor. "The fact that the child has the number names ready to hand gives an immense momentum to the development of the number series-idea."¹ Enough has probably been set down to show that the child's use of names at first is not an application of them to groups of objects, but in this (second) stage, are merely a motor symbolism for the inner series which he has gained in ways described. Articulatory response to a prompting subjective succession—motif now takes the place of other motor and objective responses, which were found either in his own bodily economy, or in sensible presentations with which he created or to which he imputed appropriate responses. Having attained the articulatory response, he does not at once and altogether abandon his more primitive responses, the tendency to use rhythmical movement, *e. g.*, remains. A child, forbidden to use his fingers, will wiggle his toes inside his shoes, etc.

This stage of consciousness is essentially a counting period and any words that can be arranged into a series would do and often does as well as the one which society has furnished him, *e. g.*, eeny, meeny, minee mo, etc. The counting is spontaneous and entirely free from sensible observation. The abstraction and generalization of number from a group of objects (Dewey) and the application of number to objects come later and furnish the essential problem with the beginning school child.

The development of the number concept in the mathematical sense is mainly a problem that concerns the child of school age. Heretofore, his number sense has been an idea of succession with objects and motor activities (including naming) as symbols of a subjective series. Now he must be led to *apply* his number series not only to successive, but to simultaneous presentations in order that he may describe, if need be, his experiences in accurate numerical terms. There is substantial agreement that he must derive this abstraction, number in the strict sense, through perception of things. The apparatus, materials and devices of the school room and the

(1) Phillips, page 238.

guidance of the teacher are the aids that secure the systematic and economical furtherance of the growing concept. But it should not be overlooked that the child comes to school, as a rule, with a dawning knowledge, at least, of the meaning and the art of applied number and this signifies that concepts are present up to a certain point. The observations and experiments on children of pre-school age afford some degree of information on this point.

Theophil Fries¹ (1906) studied the question how the command of the numbers represented by the first digits arises in the first years of life. He began with a child of two, using nine pins. When the child's back was turned he took away as many as three pins, but the child seemed to notice nothing unusual. Preyer had said that a ten-months-old child noticed the taking away of one pin. After eight days experimenting, Fries reached only negative results. The difference noticed by Preyer's child must have been quantitative (change in specific magnitude) not numerical. Not until the number was reduced to two or three would Fries's child cry "others." Further experiment showed that the child really commanded no number higher than two. The child could count, but at first *his counting had no reference to his making out two*. Nine months later the relation between the *numbers* and the *number-words* for one and two, had considerably cleared up. But *one* and *two* were also associated with *small* and *large*, showing that *form* and *magnitude* were in a sense their background. Later the child commanded the number three, but did not definitely connect his memorized number-words with it. At the age of three and one-half years three was found to be mastered, but the child did not know more than three things when presented. Threeness was found to be mastered not only in special adjacency, but also in temporal sequence or succession. Just after the child had finished its fourth year, experiments on number *four* were made which was found to be not established—a concept still in the making.

John I. Jegi's girl (1901), at two years, named the numerals in correct order to twelve, occasionally to seventeen, but had little sense of their real value except in the case of one and two. There seemed a vague feeling that the higher numbers applied to greater

(1) This study and the following one (Jegi) are taken substantially from Hall's Educational Problems, Vol. II, Chap. XVIII.

magnitudes. Three was a favorite expression for a small number less than six or seven while eight and eleven were used in designating more. She would count the seventeen stairs and then say three were eleven or thirteen, rarely giving the right number. At first the numerals were not given in the right order. Little progress was made during the four months following the second birthday; although she showed marked improvement in the ability to compare magnitudes, she made no attempt to state her conclusions numerically.

I WOULD rather take a boy who has had a widowed mother to support, and who has had to get his education by working for it, than take a graduate of our schools. The boy realizes that he doesn't know everything, and what he learns he masters thoroughly. The students of our schools are turned out unfit for the state of life that they are in. So much time is spent by classes at the colleges in athletics and reunions and different things that I am surprised that college graduates know as much as they really do. I do not underestimate the value of the trained mind, because I believe that men like John Marshall have done more for this country than any of those who have led the armies in our history.—*J. J. Hill.*

Literary Snap-Shots

By Mary Eleanor Kramer

A REALLY charming and valuable nature periodical makes it debut this month with its January-February issue. It is a new edition of "Birds and Nature," issued bi-monthly, written by authorities on birds, their habits, food, economic value, etc. The colored plates are the best that can be obtained and represent twenty years of labor. The reproductions are beautiful and they include not only plates of birds, but also of animals, flowers, insects, shells, minerals, fish, etc. The color-photograph process has been used, photographing each color and photographing from nature; there will be forty-eight plates and 198 pages of text in each volume. The paper used is excellent and the type is clear and easy to read. The color cover picture is tipped-on, and under it is printed the contents. It is really a noteworthy periodical, and the only one of its scope and purpose obtainable.—(A. W. Mumford, Publ., Chicago.)

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Margaret Peterson's "The Lure of the Little Drum" was awarded the prize of \$1,250 offered by Andrew Melrose, the English publisher, for the best novel submitted in the literary competition recently instituted by him.—("The Lure of the Little Drum," by Margaret Peterson, Putnam Co.)

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Elementary Agriculture: The author of this work, Mr. William Lewis Nida, has taught in the rural schools and has wrestled with the problems of the common schools from the office of the supervisor of township schools. His experience has therefore fitted him especially to write for the children of the rural schools. The work covers every phase of farm life; there are chapters on all farm animals as well as birds, bees, and poultry; chapters on insects, soils, and all the leading farm crops. The book will be help-

ful to all teachers, now that agriculture is becoming one of the regular studies in the school curriculum.—("Elementary Agriculture," by William Lewis Nida, Ph.B. A. Flanagan Co., Chicago.)

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On November 29th, in Chicago, the National Council of Teachers of English finished a three days' annual meeting and they have put their seal upon a proposition to teach modern authors in the schools and universities, because the general consensus of opinion was that the classics were not of much value for educational purposes. According to Prof. W. H. Wilcox, of the Maryland State Normal School, the curriculum will consist of equal parts of Alexander Dumas, Jack London, Richard Harding Davis, Booth Tarkington, selections from De Maupassant for older pupils, and Kipling for all. "It is time that the art of teaching received some consideration," said James F. Hosic of the Chicago Teachers' College. "The trouble is that we have too many young teachers who have received their degrees from writing treatises upon the comparative philology of the intransitive verb."

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"The International" for December, contains an interesting article on "Yiddish Literature" from the pen of Harry Rogoff. In part he says: "The founders of Yiddish literature, the creators of its classics and the molders of its literary phrase, are still among the living. Only one of them, the 'Zaida' (grandfather), has attained to the biblical limit of three score and ten. The others are still in the period of activity. A very young literature indeed. Nevertheless, it can boast of an interesting history and of a wonderful evolution and progress. Fifty years ago the very mention of the name would have evoked laughter, even from the nationalistic zealots. Today Yiddish literature is one of the most potent agents for awakening and fostering a Jewish consciousness amongst the various strata of the race. In the fraternity of International Literature, the Yiddish hasn't yet been awarded a place. To the average American, it is non-existent. Only a few have made the "discovery"; and they too, generally know it and judge it by the

one representative, Morris Rosenfeld, the bearer of that striking epithet, the "Ghetto or the Tailor Poet."

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Mrs. Ruth McEnery Stuart's dedication of her new book "Daddy-Do-Funny," is notable. It reads: "To the memory of those faithful brown slave-men of the plantations throughout the South, Daddy's contemporaries all, who during the war, while their masters were away fighting in a cause opposed to their emancipation, brought their blankets and slept outside their mistress' doors, thus keeping nightwatch over otherwise unprotected women and children—a faithful guardianship of which the annals of those troublous times record no instance of betrayal."

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"Oh you sorrows and wrongs I have suffered—I prize you with all triumphs and supremest joys."—Helen Woljeska in "The International."

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Simultaneously with the giving to the public of James Whitcomb Riley's new biographical edition of poems, many interesting items in the life of this writer hitherto unknown are becoming public; one such tells of how his first real public recognition came about: "Mr. Riley gained his first real recognition among the literary men of the country at a mass meeting in Chickering Hall, New York City, in 1887. At that time a meeting was held on behalf of the movement to get international copyright laws passed. Through the influence of his dear friend, 'Bill' Nye, Mr. Riley who was then little known outside of his own state, was given a place on the program, along with such men as Mark Twain, William Dean Howells, George W. Cable, and others. When Mr. Riley recited his poems the audience was taken off its feet. Sir Henry Irving came to the poet personally to congratulate him. James Russell Lowell, who acted as chairman, paid him a remarkable tribute, and from that day on Riley was given a place among the great men of letters of America."

It may be of farther interest to note that the citizens of Greenfield, Indiana, have planned to erect a monument to Mr. Riley on the public square, the ground to be broken on his birthday. The movement was started by the James Whitcomb Riley Club, of Greenfield, a literary organization well known throughout the middle west.

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Two books of Bedtime Stories, by Thornton W. Burgess, will be eagerly sought after by mothers. Each book is devoted to the adventures of one animal and tells of his pranks, his good times, his troubles, his enemies and the friends who help him. The stories are true to nature and are just the right kind to read at bedtime.—("The Adventures of Reddy Fox" and "The Adventures of Johnny Chuck," by Thornton W. Burgess. Little, Brown & Co., Boston.)

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The first of George Edward Woodberry's article on North Africa and the Desert begins in the January issue of Scribner's magazine. The first one is entitled "Tunisian Days." Mr. Woodberry is a keen and observing traveler and one of the foremost American poets. Madame Waddington begins a new series in this number called "My First Years as a Frenchwoman." Her marriage to M. Waddington took place at a very critical time, just after the Franco-German war, and her reminiscences tell of her opportunities and associations with the famous personages in public life, in literature, art and music, at that time. Another serial is "Maje," by Armistead C. Gordon. It tells the love story of an old Confederate war veteran. An article which is sure to arouse interest is "Politicians and the Sense of Humor," by Prof. Henry S. Pritchett. Among the poems included is Robert Louis Stevenson's "Student Song."

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Mr. Breton Braley's "Sonnets of a Suffragette" is timely in its theme and tuneful in its smoothly flowing verse. It contains, be-

side the numbers indicated in the title, sundry love sonnets of a manicure, love lyrics of a shop girl, and love lyrics of a chauffeur. It is certainly calculated to dispel care, smooth the ruffled brow and induce a mirthful state of mind.—("Sonnets of a Suffragette," by Breton Braley. Browne & Howell Co., Chicago.)

* * * * *

With the Men who do Things: This is a book which every parent and teacher will welcome with joy. Every sound, healthy boy is endowed with a craving for information. It is with the purpose of satisfying that craving, insofar as it applies to engineering matters, that this book has been prepared. The book is written in story form, thus presenting a scientific story in a most attractive form; the most remarkable of the adventures are based on fact. It recounts the experiences of two young boys who spend a summer vacation seeing the engineering wonders of New York. We find them with the ironworker far above the city with the foundation builder deep under the ground, with the "sand hog" driving tunnels under water through quicksand, and in a score of other novel situations.—(With the Men Who Do Things, by A. Russell Bond. Munn & Co., Publ., New York City.)

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Unvisited Places of Old Europe: This is a unique book on Europe, a book that is different, written by one who knows the usual Europe extremely well and shows how to find a Europe new and still more fascinating. Throughout his aim is not only to describe what he has seen, but to encourage the reader to discoveries of his own. Down near Venice lies a weedy ancient waterway along which Doges and Princes once urged their gilded barges to and from the sculptured and frescoed palaces that lined the banks. The world has forgotten them, but they stand still, unbelievably magnificent ducal homes, rich in beauty and in legend. That is the Brenta—the last unvisited locality told of in the book, and perhaps the most picturesque.

To one who has visited Europe, or who expects to go there, it

will prove invaluable.—(Unvisited Places of Europe, by Robert Shackleton. The Penn Publ. Co., Philadelphia, Pa.)

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The American Magazine, for January, contains Edna Ferber's newest story "Making Good With Mother," a sequel to the Emma McChesney stories. Other interesting stories include "The Snapdragon Sonata," by Walter Pritchard Eaton; "Henry Clay Cutler and the Indian Question," another "Red Saunder's," story by Henry Wallace Phillips; and "Hum-Drum," a slice from everyday life by Alfred Ollivant. "Better Boys," is a remarkable article by Charles K. T aylot, M.A. "A Court of Hope and Goodwill," is another of universal interest, by Ida M. Tarbell.

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The Medici Prints: How many teachers are familiar with the beautiful Medici Prints, a series of reproductions in color after the Old Masters, published by The Medici Society of London, for whom Foster Bros., Boston, are the sole agents in the U. S.

The plates in this series certainly mark a stage in the art of photographic reproductions in colors in advance of any yet arrived at. The imitation is extraordinarily exact. The photograph being able to reproduce the very texture of the fresco, and the color does not obscure that texture, but seems to be a part of it. These prints give one a real sense of the original, and are invaluable in the teaching of "Stories of Artists," and their works to children. The prices are very reasonable. If you are contemplating the purchase of art subjects for the school room, do not fail to examine these prints before purchasing.—(The Medici Prints. Foster Bros., Boston, Mass.)

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An article of special interest is Rose Young's "Guilty of Motherhood," in Good Housekeeping for January. This is the story of the New York City teacher who asked of the Board of Education of that place, permission for a leave of absence for

one year "to bear and rear a child," and was refused. This case, and its development, is of great interest to every teacher throughout the land. Another article of universal interest is Montrose J. Moses' "What Do Children Read?"

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The leading article in the Atlantic for January is "Popular Education," by Agnes Repplier; this is followed by "Much Ado About Women," by E. S. Martin, while Alfred Hayes tells most entertainingly of "The Relation of Music to Poetry." John Burroughs contributes a delightful paper on "A Prophet of the Soul."

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The current issue of "The Mother's Magazine" contains much of interest and help to teachers, among which may be mentioned: "Home Sex Education," by William Lee Howard, M.D.; "The False Home Standard," by Jane McClellan Coombs; "Saving the Girls," by Sidney Reid, and "Finding Out Teacher," by Bell Elliott Palmer.

1000 Pertinent Literary Queries

By Mary Eleanor Kramer

(Continued)

101-200

101. Who was known as "The Children's Poet"?
102. What and where is "Oak Knoll"?
103. Who wrote, "Everywhere, Everywhere, Christmas To night"?
104. What and where is "Orchard House"?
105. Who was termed "The Sweet Singer"?
106. Who was called "Elizabeth, the Wise"?
107. What and where was "Ponkapog"?
108. What writers immortalized Graylock mountain?
109. Who said:
 "Great deeds cannot die:
 They with the sun and moon renew their light
 Forever, blessing those that look on them"?
110. Who wrote "The Land of the Midnight Sun"?
111. Who wrote "The Red Badge of Courage"?
112. Of whom was it written:
 "None knew him but to love him,
 None named him but to praise"?
113. For what was "Griff House" noted?
114. What was the "Bread and Cheese Club"?
115. Who wrote "The Luck of Roaring Camp"?
116. For what is "Craigdarrock" noted?
117. What writer resides in a double cottage, known respectively as "The Bungalow" and "The Barracks"?
118. Who wrote "The Bird's Christmas Carol"?
119. What poet selected his own burial place, and designed his own sepulcher?
120. Who was the original "Little Nell" of Dicken's "Old Curiosity Shop"?
121. What was the origin of Dicken's pen-name "Boz"?

122. Who said: "I lose myself in other men's minds"?
123. Who wrote: "Old Town Folks," said to be the most authentic description of early New England life?
124. Who was the originator of the first circulating library?
125. What American writer's name was covered with ivy, grown from an original cutting from Sir Walter Scott's home at Abbotsford?
126. For what is Cripplegate churchyard famed?
127. What book is said to stand for chivalry in full flower?
128. What work is said to stand for the decline and fall of chivalry?
129. Where do we find the following literary heroes: "Ulysses," "Falstaff," "Leatherstocking," "John Valjean," "Uncle Remus"?
130. Where do we find the following literary heroines: "Becky Sharp," "Dora," "Pippa," "Gloria Quayle," "Hester Prynne"?
131. Who was Arthur Hallam, and what part did he play in English literature?
132. Who wrote "The Battle of Hohenlinden"?
133. Who said: "Hawthorne's 'House of Seven Gables' is the most valuable contribution to New England history, that has yet been made"?
134. Who wrote "The Battle of Waterloo"?
135. Who wrote "Hypatia"?
136. Who wrote the following lines:
 " 'Tis not in the high stars alone,
 Nor in the cup of budding flowers,
 Nor in the red-breast's mellow tone,
 Nor in the bow that smiles in showers,
 But in the mud and scum of things,
 There alway, alway something sings"?
137. Where and what is the "9rd Manse"?
138. Who said "I am a part of all I have met"?
139. Who wrote "Pickwick Papers"?
140. For what was Cheyne Walk noted?
141. What English novelist was a noted caricaturist?
142. Who lived at "Craigenputtock"?

143. Who was the author of the lines :
 "Wherever God erects a house of prayer,
 The devil builds a chapel there;
 And 'twill be found, upon examination,
 The latter has the largest congregation"?
144. Who said: "None but the brave deserve the fair"?
145. What English poet was three times married?
146. Who wrote "The Complete Angler"?
147. Who said:
 "One good deed dying tongueless
 Strangles a thousand, waiting upon that"?
148. For what was "Kilcolman" noted?
149. Who was termed "The Father of English Poetry"?
150. Who said: "Self-conquest is the greatest of all victories"?
151. Who was termed the "Jean Ingelow of America"?
152. Who wrote under the sobriquet of "Pansy"?
153. Who was the author of "The Marble Faun"?
154. What historian established the naval academy at Annapolis?
155. Who said:
 "Silence is vocal, if we listen well,
 And life and being sing in duldest ears
 From morn to night, from night to morn again
 With fine articulation"?
156. Who said of Bronson Alcott: "He is the most refined and the most advanced soul we have had in New England, he makes all others appear slow and cheap and mechanic"?
157. Who said: "Liberty, when it begins to take root, is a plant of rapid growth"?
158. What and where was "Woodland Hall"?
159. Who wrote: "Moths of the Limberlost"?
160. Who was called the "Banker-Poet"?
161. Who wrote an "Ode to a Butterfly"?
162. Where was Holmes' famous "long walk," mentioned in the "Autocrat"?
163. For what is "Kelmscott House" noted?
164. For what is "Hogarth Lane" noted?
165. For what is "Walpole House" noted?

166. Who said :
 "The crown
 Of all my life was utmost quietude"?
167. Who wrote "America"?
168. Who wrote "The Star-Spangled Banner"?
169. Who said: "Words are the daughters of earth, and deeds
 are the sons of heaven"?
170. Who wrote "Queed"?
171. Who wrote "The Book of Joyous Children"?
172. What American novelist is the grandson of the famous
 actress Frances Ann Kemble (Fannie Kemball)?
173. Whom did Whittier term "The Cadmus of the Blind"?
174. Who wrote "The Battle Hymn of the Republic"?
175. What American novelist first won fame through his stories
 of life in the Klondike regions?
176. What famous historian graduated from Harvard college
 when but eighteen years of age?
177. Who said: "There is but one straight road to success,
 and that is merit"?
178. What celebrated English statesman said of the Constitu-
 tion of the United States: "As far as I can see, the
 American Constitution is the most wonderful work ever
 struck off at one time by the brain and purpose of man"?
179. What was Elizabeth Barrett Browning's definition of life?
180. Who wrote "Lucille"?
181. Who said: "I always believed in life rather than books"?
182. Who has been termed "America's best-loved poet"?
183. What English poet was called the "Poet of Nature"?
184. What poet owned a famous dog named "Boatswain"?
185. For what is Avonmouth noted?
186. Where do we find the following literary characters:
 "Maggie Tulliver," "Lizzie Hexam," "Wackford
 Squeers," "Mary Ashburton," "Little Annie," "Little
 Nell," "Elsie Venner," "Freckles," "Rebecca."
187. For what is Tabard Inn famous?
188. What and where was "Crazy Castle"?
189. Who was the "Wizard of the North"?
190. Who was called "The Ettrick Shepherd"?

191. Who said: "If we cherish the virtues and the principles of our fathers, Heaven will assist us to carry on the work of human liberty and human happiness"?
192. What speech is spoken of as "the most eloquent oration in the English language"?
193. What great statesman-reformer-orator was caned in the United States Senate chamber by Preston A. Brooks?
194. What famous father and daughter were born on November 29th?
195. Who was the founder of the "Nationalist Clubs" in the United States?
196. Who was termed "The Tenth Muse"?
197. Who wrote "Ziz-Zag Journeys"?
198. Who was known as "Gail Hamilton"?
199. Who wrote "The Hoosier School-Master"?
200. Who wrote "Over the Hills to the Poor House"?

A Philosophical Play

IF HAPPENS on very rare occasions that one of the leading New York critics becomes so enthusiastic over a play that he goes back to see it again. An instance of this is "Omar, the Tentmaker," the Persian love play in which Guy Bates Post is appearing at the Booth. Alan Dale fell in love with it, according to his own confession, and he came back to see another performance the same week. In his Sunday column in the American, he wrote as follows:

"I certainly loved 'Omar Khayyam' and I am proud to go on record as having testified to its beauty and its charm. Mr. Richard Walton Tully may well feel that he has done a noble thing for the stage in his presentation of this vivid and magnetically loved play. That some critical opinion has been adverse is but another feather in its cap. The subject was large, far-reaching and comparatively unexplored. It went into the world of psychics; it was certainly philosophical; it was a plea for an universal religion. London and Paris would have raved over it, and at the two performances I saw I am bound to admit that New York wasn't backward in its approval. I revelled in 'Omar.' It touched me, and it bathed me in its charm. To me, it seemed to be one of the very few productions of the season that were worth while."

NEW BOOKS

Five Messages to Teachers of Primary Reading. By Nettie Alice Sawyer. Formerly Supervisor of Primary Education, Seattle, Washington. 213 pages. Rand, McNally & Co.

Songs and Stories for the Little Ones. By E. Gordon Browne. Melodies chosen and arranged by Eva Browne. 143 pages. Houghton, Mifflin Co.

On Rend L'Argent. Edited with Notes and Vocabulary by Philip Warner Harry, Ph.D., Assistant Professor of Romance Languages, University of Pittsburgh. 143 pages. 50c. Ginn & Co.

Moser, Der Bibliothekar (2nd or 3rd year), with Notes, Vocabulary, Fragen, and Exercises. Edited by Frederick W. C. Lieder, Instructor in German in Harvard University. 218 pages. Price 45c. Ginn & Co.

The Beacon First Reader. By James H. Fassett, Supt. of Schools, Nashua, New Hampshire. Illustrated. 160 pages. Price 35c. Ginn & Co.

Familiar Song Classics. By Baldwin and Newton. Price 10c. Ginn & Co.

Nixie Bunny in Work-a-Day-Land. A Reader of Occupation and Industry for the Second and Third Grades. By Joseph C. Sindelar. Illustrated. Price 40 cents, postpaid.

Improving Songs for Anxious Children. By John & Rue Carpenter. G. Schirmer, Publisher.

Oral English for Secondary Schools. By William Palmer Smith, B.S., Stuyvesant High School, New York City. 358 pages. Price \$1.00.

Bulletins of the Bureau of Education

The Faragut School—A Tennessee Country-Life High School.

The Fitchburg Plan of Co-operative Industrial Education. By Matthew R. McCann, Physics Department, English High School, Worcester, Mass.

Sanitary Schoolhouses. Legal Requirements in Indiana and Ohio.

Education of the Immigrant. Abstracts of Papers Read at a Public Conference Under the Auspices of the New York-New Jersey Committee of the North American Civic League for Immigrants, held at New York City, May 16 and 17, 1913.

The New Philosophy. By Calvin Samuel Page. 800 pages. Price \$3.50. Prepaid. Science Publishing Co., Chicago, Ill.

Introduction to Botany. By Joseph Y. Bergen, recently Instructor in Biology in the English High School, Boston, and Otis W. Caldwell, Associate Professor of Botany in the University of Chicago. Illustrated, 368 pages. Price \$1.15. Ginn & Co.

Industrial Studies—Europe. By Nellie B. Allen, Head of the Department of Geography, State Normal School, Fitchburg. 12mo, cloth, 409 pages, illustrated. 80 cents. Ginn & Co.

Lessons in Pedagogy

By Charles H. Davis, B.S.

Principal P. S. No. 25, Borough of Queens, N. Y. C.

Methods of Teaching

I. Correction of Written Exercises.

NEARLY every teacher has her own plan for correcting home work and other written exercises; but the following methods and suggestions will be found helpful:

(a) Correction by the Teacher.—This takes too much time and energy, if the teacher follows this plan all the time. The pupils should be taught to do the correcting for themselves on most of the regular work under the supervision and guidance of the teacher. It is, of course, advisable for the teacher to do all of the marking of a set of papers occasionally.

(b) Correction by Monitors.—This method takes some of the pupils from the regular work, and often becomes a source of jealousy and bad feeling. It does, however, tend to promote ambition for such a work of honor and responsibility.

(c) Correction by Exchange of Papers.—This plan of correction has such advantages as arousing interest through self-activity, promoting ambition through imitation of a good pupil's paper, stimulating lazy pupils to do persistent and accurate work, and contributing to the order in a class on account of having enough work to do. Some teachers claim that this method of correction leads to collusion, disputes and disorder; but these are not valid objections when a class is properly disciplined. A good way to avoid disorder of any kind is to distribute papers so that no pupil knows who is correcting his paper until the work is completed. To fix responsibility and make pupils more careful in correcting, each critic should be required to sign his name. The teacher should always glance over the corrected papers, and act as a final judge on all appeals.

(d) Correction by Model on Blackboard.—Have one pupil write his work on the board and then let each pupil correct his own

paper. This is an excellent plan as it exercises eyes, ears and hands. Here, again we have activity of pupils under guidance.

(e) Self-Correction.—This should always be the ultimate general standard to be attained. It is not an attainment of a term or a year but it is rather an effort toward helping in the development of a life habit. It calls out all the resources of the pupil, embodies all the devices and methods of the teacher, and practically applies all the principles of education.

(f) Suggestions to secure good results.—

- (1) Use the blackboards for class exercises. The pupils enjoy the physical activity; the teacher can estimate the work of each pupil at a glance; attention, interest and class spirit are aroused; and the orderly passing to and from the board can be made a helpful factor in discipline.
- (2) Post written work of the pupil where they can be examined by the class. Take one day's home work or one period's work for example. The silent effect will soon become a stimulus toward higher standards. Invite public inspection.
- (3) Assign criticism as home work. Let certain pupils take papers home, check the work, and submit written criticisms or hold oral conferences with the ones whose papers are criticised. Judicious assignment will arouse the backward pupils and stimulate a good social feeling in the class.
- (4) Encouragement. Promote a spirit of helpful criticism; praise neatness, accuracy and progress; commend every product of worthy efforts; and, finally let your own sympathetic leadership as critic encourage your pupils into rational imitation of your own efforts.

II. Froebel and the Kindergarten.

Frederick Froebel, one of the most illustrious disciples of Pestalozzi, was born in Thuringia, in 1782. Having early lost his mother, Froebel received very little, if any, home training. He obtained his first education in the village school, where he received the birth to a higher spiritual education.

His local surroundings tended to bring him into sympathy with

Nature. At ten years of age he went to live with an uncle, who was kind to him and who sent him to the town school of Stadt-Ilm. Five years later he became a forester's apprentice. This man was too busy to give Froebel the promised instruction. Thrown upon his own resources, Froebel studied what book he could find or borrow dealing with botany and Nature work. Later he attended the University of Jena, spent two years with Pestalozzi at Tverdun, and finally studied at the Universities of Göttingen and Berlin. After serving in the Prussian army, he established a school at Keilhau, in which he followed "the principle of cultivating the self-activity of the pupil by connecting manual labor with every study." After fifteen years of experience, he was convinced that a change in the earliest methods of instruction was necessary to a thorough educational reform. This brings us to the *Kindergarten*, upon which the fame of Froebel chiefly rests.

Carefully considering the ways of children, Froebel saw that they delight in movement; that they use their senses; that they observe; that they invent and construct. All this activity he proposed to turn to account in the interest of education. He said: "I can convert children's activities, energies, amusements, occupations, all that goes by the name of play, into instruments for my purpose, and therefore transform play into work. This work will be education in the true sense of the term. The conception of it as such I have gained from the children themselves. They have taught me how I am to teach them."

The Kindergarten is a school which receives children at a very early age, and by systematizing their plays, directing their activity, and giving order to their ideas, develops their faculties harmoniously, and prepares them for the work of the ordinary school. The object of the Kindergarten, as expressed by Froebel himself, is as follows: "It shall receive children before the usual school age, give them employment suited to their nature, strengthen their bodies, exercise their senses, employ the waking mind, make them acquainted judiciously with Nature and society, cultivate especially the heart and temper, and lead them to the foundation of all living—to unity with themselves."

The physical nature of the child is developed by calisthenic exercises; its social instincts are strengthened by association with

companions in amusements and work; its senses are cultivated by means of playthings, called gifts, such as balls, cylinders, cones, variously dissected cubes, quadrilateral and triangular tablets, sticks and mats for weaving; and its mind is exercised by the imitative or inventive uses it is taught to make of these objects.

The effects of the Kindergarten training have been thus summed up by one teacher:

"What the Kindergarten has to show are happy, healthy, good-natured children; no proficiency in learning of any kind, no precocity; but just children in their normal state. The Kindergarten rejects reading, writing ciphering, spelling. In it children under six build, plait, fold, model, sing, act; in short, they learn in *play* to work, to construct, to invent, to relate and speak correctly, and what is best of all—to love each other, to be kind to each other, to help each other."

The leading ideas in Froebel's educational system have been summed up as follows:

1. "The task of education is to assist natural development toward its destined end. As the child's development begins with its first breath, so must its education also.

2. "As the beginning of a basis to the whole after-development, so the early beginnings of education are of most importance.

3. "The spiritual and physical development do not go on separately in childhood, but the two are closely bound up with each other.

4. "Early education must deal directly with the physical development, and influence the spiritual development through the exercise of the senses.

5. "The right mode of procedure in the exercise of these organs is indicated by nature in the utterances of the child's instincts, and through these alone can a natural basis of education be found.

6. "The instincts of the child, as a being destined to become reasonable, express not only physical but also spiritual wants. Education has to satisfy both.

7. "The development of the limbs by means of movement is the first that takes place, and therefore claims our first attention.

8. "Physical impressions are at the beginning of life the only possible medium for awakening the child's soul. These impres-

sions should, therefore, be regulated as systematically as is the care of the body, and not be left to chance."

Sully in his psychology says that Froebel has built on solid psychological ground in maintaining—

1. That knowledge and activity are closely related.
2. That the child's spontaneous activity is the force that sets the mechanism of the senses in movement.
3. That perception includes the employment not only of the eye, but of the hand.
4. That a nice perception of form is only gained in connection with the device of manual reproduction.

Froebel died June 21, 1852.

NOTE.—In preparing this article the following books have been consulted and quoted from: McEvoy's "Courses in Pedagogy," Painter's "History of Education."

III. Questions for Review and Discussion.

1. What aim of education was recognized by Froebel?
2. What particular purpose in Kindergarten work is served by the mother plays?
3. What is the specific purpose of the Kindergarten?
4. What principle governs the relation of play to work in the Kindergarten?
5. In what manner should the spirit of the Kindergarten permeate all the grades of our schools?
6. Do you regard the Kindergarten as entitled to a distinct place in our American system of public schools, and why?
7. Name four personal habits that should characterize the teacher.
8. Which of the following objects of education is more important: the acquisition of knowledge, or mental development?
9. Illustrate the difference between fault-finding with a pupil's lesson and criticising it.
10. How may disorder generally be avoided?

Geography---Plan of Study

(New York Syllabus)

IN STUDYING the continents as wholes, attention should be directed to their comparative sizes (North America being taken as a unit), relative positions, their general contour, their great mountain systems, their great rivers, their large seas, gulfs, and bays, and their important neighboring islands. Then should follow the main political divisions and the positions of important cities.

In studying a country the following series of topics, as far as they may be applicable to the country under consideration and in the grade in which the lesson may be given, is suggested:

1. Location as determined by latitude and longitude and with relation to surrounding countries and waters.

Pupils should never be told the latitude and the longitude nor required to memorize them, but should be trained to determine them by the inspection of a map.

2. Comparative size and shape.

The area of the State of New York (about 50,000 square miles) may be taken as the unit with which the areas of all countries shall be compared. The comparative size should never be told, but should be made a matter of calculation on the part of the pupil.

3. Mountain systems and important ranges; slopes and plains.

4. River systems and important rivers.

5. Important cities, their location, and their comparative population.

The population of The City of New York, four millions in round numbers, may be taken as the unit of comparison. When learning about a city, the reasons for which it is celebrated should be brought out.

6. Climate, industries, products, and areas of production.

7. Form of government and general condition of the people as to education and ways of living.

Under the head of "Ways of Living" should be included housing, food, clothing, occupations, and use of animals.

8. Exports and imports, trade, particularly with the United States.

Most of the work in geography should be done in the class room. Very little, if any, study at home is necessary. The lesson should generally begin with a study of a globe or a map. This should be followed or accompanied by the reading of pertinent selections from the text-book or supplementary reader. The selections should be read aloud in class, and pupils should be expected to answer questions after a single reading. Then some time should be spent in copying the map roughly from the book or from the wall, indicating such phases of the subject as have been studied. The next lesson should consist largely in questioning the pupils with the map before them and in requiring them to make rapid sketches of maps from memory. This exercise is the best method of fixing geographical knowledge and of showing the pupil how accurate his knowledge is. It is, moreover, the easiest way to teach much of this subject, as well as the easiest way to test the definiteness with which the subject has been learned. Care should be taken to see that these maps are only sketches and that time is not wasted on the unnecessary elaboration of details. Neither tracing nor construction lines should be used. Sand or clay modeling may be used in the early grades to give a conception of the surface of a continent or a country.

A valuable aid to instruction in geography is a picture. The only true conceptions of certain elements of geographical knowledge are obtained by travel and observation. But travel and observation for children are restricted within very narrow limits, and the best substitute is the picture. One picture is often worth volumes of verbal description, and at the present time there is scarcely any place or any feature of life or human activity of which a picture is not easily obtainable. Pictures are useful, however, only when children are trained not only to see and name the objects they contain, but to draw conclusions from them regarding the character of vegetation, the habitat and habits of animals, the ways of living and occupations of men, and other topics involved in the teaching of geography.

In the higher grades, pupils should be exercised in making synoptic outlines of topics treated in the text-book.

The following aids in the teaching of geography should be found in every school:

Globe; outline, commercial. United States geological survey,

topographic and census maps; weather charts, pictures, photographs, lantern slides and other illustrative material; collections of minerals, rocks, soils, seeds, raw and manufactured material, text-books, books of reference on geography, history, biography, travel, natural history; magazine articles, newspaper clippings, almanacs of the New York dailies, railroad and steamboat guides, and official reports.

Summary by the Author.

(a) Aim.—“The aim in teaching geography should be to give the pupil knowledge of the earth as it ministers to human life.”

(b) Psychology.—As geographical facts are measured by man's welfare, the subject of geography becomes far more than a mere memory study; it employs observation, imagination, reason and judgment.

(c) Methods.—Both analytic and synthetic methods are used. The analytic treatment of the earth and its subdivisions is given by using the globe. The synthetic method is used by having pupils make map of school room and of school grounds as an introduction to the study of maps of city or country. Home geography covers location, nationalities and local history in such a way that pupils become familiar with industrial, civic and social relations.

Advantages for both methods are claimed as follows:

Advantages of Analytic Method.

- (a) Familiarity with the globe.
- (b) Better view of size, position, division of land and water.
- (c) It enables teacher to explain motions of the earth with causes of day and night, and the change of seasons.

Advantages of Synthetic Method.

- (a) Known to related unknown.
- (b) Interest in familiar objects.
- (c) Concrete to abstract.
- (d) Inductive method of questioning.
- (e) From near to remote.
- (f) It gives pupils a fundamental knowledge that enables him to pursue the study alone—self activity.

Aids and Devices.

- (a) Use outline maps.
- (b) Globe, wall-maps, moulding-board.
- (c) Pupils make product maps to illustrate resources.
- (d) Have bulletin with interesting articles of the topics of the day.
- (e) Pupils make scrap books.
- (f) Have pupils prepare suitable review questions at home.
- (g) Assign special topics for discussion.
- (h) Have debates in the upper grades.
- (i) Correlate with history, literature and science.
- (j) For interest and self-activity, plan commercial trips, such as Boston to Bombay; New York to Alexandria. Pupils may tell, steamship line, route, cargo, cities passed, rank of nations, climate of countries, ocean currents, return cargo, etc.
- (k) McMurry advocates the use of type-studies in geography. For example, take children on real or imaginary excursions to study natural, industrial, or social types. A coal mine, the prairies, cotton and cotton plantations, an iron foundry, and Lake Superior are such type studies.

The advantages claimed are the following:

- (a) Realities are studied.
- (b) The work is interesting and instructive.
- (c) Types are keys to larger areas of geographical knowledge.
- (d) The study of causes and causal relations.
- (e) Basis of a series of comparisons.
- (f) Direct path to whole groups and sequences.

The Teaching of Spelling

William E. Chancellor

CLOSELY allied with reading and writing is spelling. For all the efforts of iconoclasts, the worlds of business and of culture for some years to come will regard spelling as necessary. It does not do to say, "Let the typewriter spell." Not long ago, I received a letter from a man of high distinction that contained two misspelled words and one bad grammatical error; yet he had signed it himself. A friend of mine had received a letter from the same man with an equal number and variety of errors. And both of us couldn't help commenting. Spelling sometimes affects success in life. A very poor speller is always a very poor reader and usually a poor thinker; he errs on facts. The man who wrote of his visit to a sanitarium—"My recovery was not affected," meaning "effected," was at least ambiguous. Once I saw a letter in which the correspondent wrote of another man as "ingenuous." An inquiry showed that he meant "ingenious." There are experiences enough and jokes enough to display this point without further animadversions here. The funny mistakes of children often turn upon their inevitable weaknesses of spelling. To distinguish between "onion" and "union" often bothers them for years. At least one child thought for a time that the last book in the Bible was "Revolution."

Spelling is many different processes, of which two are of the greatest importance, *viz.*:

- (a) From eye to ear to mind to hand.
- (b) From eye to ear to mind to mouth.

For most of us at most times, the process is short—from recall in mind of a visual image of print into the hand in script. The change from the print to script makes the word look "unusual."

For success as writers of words in correct spelling, we need to automatize the co-ordination of picture with hand muscles so that we can scarcely misspell even under unusual conditions of mental excitement. Boys and men will not try to write words of whose spelling they are not sure; and there is but one way to

be sure of the spelling of a word: get it into the hand by drill upon it.

Oral (spoken) and manual (written) spelling exercises are the two familiar kinds. Of these, the first is solely pedagogical and of no use to us in ordinary life. One has no need in business to articulate clearly "a-c-c-o-m-m-o-d-a-t-i-o-n," but he may need to write it often to see whether his typewriter has spelled it correctly. Oral spelling helps in manual spelling because it separates the letters in due order and makes one doubly conscious of them—conscious in eyesight and in ear hearing. The deliberate mouth-articulation of the elements also helps. But it is waste time to spell too frequently and too lengthily according to the ear-mouth process. The hand is to be trained.

Only a few new words should be taught daily. A generous assignment is this:

Grade 1, 100 words; 2, 150; 3, 200; 4, 250; 5, 325; 6, 400; 7, 500; and 8, 500. Total, 2,375.

We made a bad error some twenty years ago, we (or some of us) discarded the daily spelling period. From the extreme of perhaps forty minutes a day on spelling to none was, in the light of the result, a misfortune to millions of children. But long lessons in spelling give the children confusion of images and of co-ordinations and produce dislike of the exercise.

A few children are eye-minded. These are the natural spellers. All the others must be drilled.

The good teacher uses various devices.

One is to let the child write in association with one word all the words of which this word reminds them—*e. g.*, clothing, shoes, stockings, dresses, etc. Beautiful, handsome, ugly, nice, neat, pleasant, etc.

Another is: Start Monday with twenty or fifty words, mostly review. On Tuesday, omit the words that all or nearly all the children spelled correctly. By Friday, only a few words will remain. Include these the next week.

Sometimes, mark the papers not only for spelling but also for speed—giving two marks.

Sometimes, mark them also for quality of handwriting.

Sometimes, require each spelling word in a sentence.

Sometimes, have them in print, high case, and low case.

Always, be sure that the children know the meaning of the word. They should be able either to speak it in a sentence; define it; or give a synonym.

While an occasional spelling match is not undesirable, yet one should remember that spelling matches train the best spellers most, and these need the training least. There are several spelling games that give equal training to the poorer spellers with the better.

Statement

The cost of producing a periodical like Educational Foundations is so considerable that the publishers have concluded to raise the price after September 1st next from \$1.25 to \$1.50 per year. This slight advance will make possible some improvements which we are sure will be appreciated. In the meantime subscribers may renew their subscription at the old rate for as many years as they please. For only 25c extra *four magazines* instead of one may be secured as announced elsewhere in this number. Many will undoubtedly be glad to avail themselves of this offer as it is indeed a most unusual one.

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Suggestion

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More than 75 per cent of our teachers are compelled to take up the duties of their profession without professional training.

Not as a substitute for a normal school course, but as a help to those who aspire to better things, the following plan is offered:

1. Subscribe for and read carefully each month—Educational Foundations.

2. Buy or borrow as many of the books named in our Study Course as possible and begin to read them systematically; or,

3. Economize by organizing a Study Club and buy the necessary books from a common fund.

4. Begin at any time and finish when you can.

5. Set aside regularly for study a half hour, if possible, every day and two hours on holidays. When time is unavoidably lost, except from illness, try to make it up the next day.

6. Upon satisfactory evidence that the course has been completed, and after such examination as the editors may wish to conduct, a certificate will be given which it is believed will be of service in aiding the owner to secure a higher license and better position.

7. The editors will be glad to answer questions at any time or to render such help as may be required. Letters may be addressed to Charles H. Davis, Associate Editor. Write to us at least once a fortnight to tell us how you are progressing. Write as often as you wish.

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"To observe with scientific precision, to report with scientific accuracy, and to think with logical correctness, are the chief needs of the educational guide of today. We have suffered over-much from platitudes in education, and we have paid our full homage to misguided and superficial flattery of schools and school systems, when searching and constructive criticism was what the public interest demanded.

"The time has certainly come when we must leave off tickling our own vanity and arousing the scornful smiles of other peoples by shouting loudly that our schools, our colleges, our universities, are the best in the world; that our expenditures for education are the largest ever known; and that, looking at all the peoples of civilization dispassionately—which dispassionateness we gladly admit—no one of them is in any way the equal of ourselves.

"Persistent, searching, constructive criticism is what American education most needs today. We must ask not only whether what we are doing is worth while in itself, but toward what goal it is tending."—Dr. Nicholas Murray Butler, at inauguration of Dr. John H. Finley as Commissioner of Education, and President State University, Albany, N. Y.

Educational Foundations

VOL. XXV.

MARCH, 1914

No. 7

Notes and Comment

TEACHERS' MAGAZINE

THIS useful and honorable publication has recently been purchased by Mr. Claude Stuart Hammock of New York. By this transaction a very brilliant star arises in the firmament of educational journalism. Mr. Hammock's ability as author and artist, and his experience as teacher and superintendent, give him unusual advantage in his new enterprise. The March number is a personal triumph for the new editor.

ORLANDO M. BAKER

ORLANDO MERRIAM BAKER, 81, one of Springfield's oldest and most beloved citizens, died at his home in Springfield, Mass., February 3rd. Death was due to an apoplectic stroke that came on while Mr. Baker was crossing the street.

Mr. Baker had for the past nine years been president of the G. & C. Merriam Company, publishers of Webster's Dictionary. To this work he devoted his life, holding it to be of the greatest public importance, and the high standard maintained by the Merriam Company has caused the dictionary to have a reputation far greater than nation-wide and to be accepted as authority wherever English is spoken. "According to Webster" has been a household word for years. To his high calling Mr. Baker applied his fine mind up to the very end of his long life. In spite of his years, he had the heart of a boy and his friendship has been a never failing delight to scores of Springfield people.

THE mental stress exacted of students is intense, and though they conscientiously respond, the main result arrived at is "to give us a body of respectable young men and women conforming rather closely to a common standard of attainment and behavior, but lacking in individuality and relatively at sea as to how to attack the problems of life."—"The Trend of Education," H. Manning Carpenter.

THE three things that must first be inculcated in the mind of a child are self-discipline, knowledge of how to think and a strengthening of his interest in the affairs of his community.—J. H. Finley.

I WOULD hire no employe who had not at least a high school education if I had my way, but if I made that a requisite I would get very few employes. The problem that is puzzling me, as well as other merchants, is where I am to get educated persons into my store as employes today to be the executives of the future. The average applicant comes to me with an education that is gained in the first six or seven grades of grammar school, and it takes me months to get him or her trained into any kind of a real employe. I will take in a girl with a high school education and pay her a third more to start than I will pay the girl who has not gone through grammar school. At the end of a few years, if they both stick to business, the educated girl will be earning three or four times as much as the girl who came to me with little more than an ability to read and write fairly.—F. N. Arbaugh, Lansing, Mich.

Some Causes of "Inefficiency"

By Hubert M. Skinner, Ph.D.

THE FAMOUS paper by Elbert Hubbard entitled "Carrying a Message to Garcia" struck a responsive chord in the hearts of the people; and after a dozen years from its first appearance it is still much in vogue. Employers of clerical forces procure editions of it for distribution among their employees as a stimulus and corrective. The reason for this is plain. There is no observing person in the United States who does not recognize the fact that this is an age of inefficiency.

The causes which have produced the condition that thus characterizes our age are numerous. One of these is the spirit of specialization in study and in the business of life—the "division of labor," as political economists would call it. In a former time the demands made upon the educated person were enormous. He was expected to know anything and everything. The teacher who presented himself for examination by the authorities might be asked a dozen questions which would now be asked only of specialists in distinct professional lines. If there was anything conceivable that a professor or, above all, a college president did not know so thoroughly as to be able to deliver off-hand a treatise upon it, the more shame to him; he was an impostor. In our time the pendulum has swung too far the other way. The man of educational opportunities and of supposedly thorough culture, perhaps holding a responsible position as an educator will often seem to pride himself on an almost inexcusable ignorance of what people of only ordinary opportunities ought to know accurately. The excuse is that he has not *specialized* in this or that subject. The indolent and listless student takes note of this mental attitude, and avails himself of it. Nay, he improves upon it, for he explains to himself that he is not specializing in *anything*.

The business world has great armies of specialists who not only restrict themselves to a very narrow circle, but put forth no special effort in that contracted circle. To make use of a crude expression of Western folklore, they are specialists by the "coon dog theory." The allusion is to the claim put forth in favor of a certain dog that he must be very desirable for hunting "coons," because he was utterly worthless for any other purpose.

As an illustration of this, take an experience of the writer, a few years since:

"Let me introduce you to our Dickens specialist," proudly said to him the manager of a very large bookstore. "If there is *anything* you want to know about Dickens or his works, ask him. For seventeen years he has handled Dickens' works exclusively right at this very case. You may say that his life has been given to Dickens."

Here, now, was an opportunity. What was the measure of the "Dickens revival" of the time? Would it probably last? Is it true that Dickens' characters number more than twenty-two hundred? Is Andrew Lang's criticism of Dickens sustained? How can we account for the prophetic character of the commercialism portrayed in "Hard Times"? Other questions, many, came trooping into mind in the presence of this "Dickens specialist" who for seventeen years had handled Dickens' books exclusively. But they were cut short by the blunt exclamation—

"There's no such book. You mean 'Hard Cash.' Dickens didn't write that."

"No, I mean 'Hard Times.' In France it is called '*Les Temps Difficile*.' It is one of the most remarkable of all the works of Dickens, though by no means one of the most popular. You will recall it by the names Jack Bounderby, Mr. Gradgrind, Mrs. Sparsit, Mr. McCloakumchild, etc. There must be calls for it from teachers, for it deals with a phase of education which nobody else has portrayed."

"You are mistaken, sir. There is no such book by Dickens. Here are the works in all bindings. Look at the titles, and see for yourself."

"I will go through the volumes, if you please."

"Well, it will do you no good. It isn't there, I tell you. There is no such book by Dickens. You are thinking of somebody else."

The book was found, bound together with "Barnaby Rudge," and it chanced that only the title of the latter appeared on the back of it. Here was a type of many a business "specialist of today."

In the work of the public schools the inefficiency has been augmented by the exploitation of theories and practices which to future generations will suggest insanity on the part of some writers of textbooks. In no part of the work is this more notable or more deplorable than in arithmetic, which is the very basis of training for work in commercial lines. The old textbooks of arithmetic and the old methods of teaching had their faults. Instead of identifying and correcting these, impulsive reformers have seized upon the faulty features and replaced them sometimes with something worse or with nothing at all.

Some of the most conspicuous of would-be reformers may be classified under the following types:

1. The "Barnburners." The allusion is to the mythical farmer who rid himself of rats in his barn by burning down the building itself. In studying the old time textbooks the pupils would often use the multiplication table for reference, instead of mastering it. A remedy offered was to eliminate the table entirely from the book, and not even to teach it orally in any systematic way! Of all the educational vagaries of our time, this will probably be deemed by future generations the most astounding.

It was an error of the old textbooks to present the entire table at once, as a single table. To master it was the work of months; and since no class was likely to spend this length of time upon a page or two of a book, there was a strong temptation to leave it before it was mastered. Multiplication *tables*, not *a* multiplication *table*, should be studied progressively, with sufficient time allowed for their mastery.

2. The "Visualizationists." It is observed that children who are deaf and dumb can learn by visualization without the aid of sound. Why not apply this method to all children? Sight and sound are the principal aids in storing the mind. It is difficult to say which is, on the whole, the more effective with young children; but it seems safe to say that the sense of hearing represents about

fifty per cent of the child's power of mental acquisition. The tables one learned, through concert recitation in part, can never be forgotten. Aged people tell us that they can still hear the sweet voices of their childhood companions of the long ago, in particular lines of the recitations. Why not throw away fifty per cent of the child's power, and trust to visualization alone? The Dutch in the East Indies destroyed fifty per cent of their pepper trees, and those remaining were equal in value to the whole. No such argument as theirs will apply here, since the eyes of children are very apt to be over-strained. An Englishman once announced, according to the story, a plan whereby sheep could be raised without any wool. Modern economy does not seek to promote waste of energy, but rather to utilize and conserve energy, both physical and intellectual. It will be difficult, in future, to explain the attitude of the Visualizationists of our era.

3. The "Anti-mnemonics." It was discovered years ago that certain students of geometry memorized the demonstration of theorems, and reproduced on the blackboard, from memory, the exact lettering of the drawings in their textbooks, thus substituting memory work for reasoning. While this abuse was not very general or very serious, it aroused certain would-be reformers to lead a crusade against "mere memory work," of whatever nature. "Memory work" was apt to be uttered with a sneer and with a puckering of the features of the speaker's face. The blight and mildew of the contempt for memory work spread over the country broadly and rapidly. Memory became "the dethroned faculty." If a child chanced to remember what he had learned at school, the fact was deemed owing to his possession of a "remarkable memory" purely native, not cultivated. To cultivate the memory, and to store it well in the years of childhood when it can be cultivated best and stored most fully, was the duty of the teacher and parent in former days. To this sensible and imperative duty we must return if we would teach the rising generation to be efficient in anything. What substitute was offered for the dethroned faculty? Reasoning? But the things which the child should acquire through memory alone are not matters of reasoning at all. The denominations of our weights and measures are arbitrary. Two pints make a quart with us, and two quarts make a pint in Scotland. Both are

arbitrary, and they are not the result of reasoning, but an inheritance from tradition. The arbitrary denominations, their arbitrary relations, and the fixed relations of numbers should be stored in the mind ready for instant use. Call it "motor activity" if you will. Say that the child says "eight times six are forty-eight" by reflex action of the spinal cord; but let him be able to say it instantly if you would have him trained for efficiency.

4. The "Counters." In thousands of schools there is little or no proper *addition* in actual practice. A child given two numbers to add together will start with one and, with the aid of his fingers perhaps, count through the units of the other, and announce the result to the gratified teacher. This evil, in greater or less measure, is almost universal. Who is to blame for it? The pupil? No. He has been taught to add by counting. He has been commanded to do that very thing. It was supposed to be necessary to "inductive work" that the pupil should evolve his own tables in addition—if he was to have any tables at all. This perversion of induction, this slavish adherence to it, causes many a teacher to require the child to add by counting for a certain period—and then to abandon the practice.

Habits—bad habits especially—are hard to break off. Why should the child be taught to enter upon a bad habit? Why should not the pupil master the combinations of simple numbers so that he can command them by "motor activity" *from the beginning* of his work in addition? Why should we not declare that in arithmetic "addition is adding *without counting*"?

It will not do to assume that teachers generally are indifferent to the evil wrought by the practical substitution of counting for addition in a great part of the work in arithmetic. Some teachers are. One teacher, suffused with laughter, once whispered to the writer, who was visiting her school—"Do look at M——, down that aisle, and see her touch her nose with her fingers in counting. She solves all her arithmetic lessons in that way, and her nose is fairly red with the impact of her fingers. Dear girl! She is so faithful in her work that she is oblivious of everything else, and does not know how much she amuses visitors."

Other teachers—many thousands of them—are distressed at the exhibitions of inefficiency of their pupils in the matter of addi-

tion, but labor as they may they can not effect the change desired. Normal teachers may well ask themselves the question why pupils are taught a practice which they must strive to unlearn. "The way to chew tobacco," said a homely wit— "is to *eschew* it from the beginning." "The way to resume," said Horace Greeley, "is to resume." The way to eliminate counting from the pupil's work in addition is to eliminate it.

That there is at the present time a reaction in favor of efficiency in arithmetic work is patent. The failures in the present work are recognized. The need of the time is not to inveigh against inefficiency, but to remove its causes. These, as stated at the outset, are many. It is no light task to turn backward a widespread if not universal tendency of the time. The return to a period of efficiency must be brought about then by united efforts of educators, business men, and indeed all classes in society. Mechanical efficiency is now at a premium. It remains to guide mental and manual work in lines no less truly economic to a conservation of energy and utility.

The most serious business of the time is to counteract the propaganda of wrong theories and practices which go far to defeat the very purposes of education. The Barnburner, the Visualizationist, and the Anti-mnemonics do not concern themselves with arithmetic only, though their influence in this branch of study has been exceedingly harmful. Their influence is felt more or less in all the work of the schools; and it is very desirable that all these classes be recognized and taken into account.

The Cultivation of English

By Alfred W. Pinneo, New York

AMERICA is rapidly becoming a land of culture. In many fields the native genius for work has achieved remarkable results.

It has been our proud boast that we can become masters of whatever field we resolutely set ourselves to conquer.

To enumerate a few of them. I may mention first the field of athletics. The American College undergraduate pursues athletics with a serious and thorough determination to be foremost in physical prowess, and the world-wide success of American athletes is proof of his stamina, devotion, and intelligent preparation for such contests.

In the field of art, men like Morgan, Altman, Widener, and others stand forth as conspicuous proofs of the fact that Americans are among the greatest connoisseurs of art in the world.

But our men of great wealth are not the only ones proficient in artistic taste, and possessed with a deep love and appreciation of beautiful things; the great masses of Americans have developed marvelously since the days of our first panoramas. In all the schools of the land the children are being made familiar with the masterpieces of painting, sculpture, and architecture through the medium of inexpensive but excellent prints, illustrating the chief works of art from every land.

The same is true of music. One need only to point to the orchestras in every large city in the country which give the best music of every age and nation. There is literally no end to operas, concerts, and recitals, all devoted to the best in music.

Now this would not be possible if the great masses of our people were not seriously trying to learn the great lesson of culture to be acquired through all these channels. If all this is true, and there is no possibility of ignoring the facts, then the Americans are becoming a highly cultured people, but—there is one very important

field, which as yet we have ignored pretty generally. I refer to the art of speaking English.

Not so very long ago there appeared in an English daily paper an advertisement, stating that a Frenchman wished to engage the services of a young woman to teach his children English, and the advertisement went on to say, "she must be an Englishwoman, no American need apply." What a slap at the young American woman—and man.

But there can be little doubt that it is not altogether unjust, for we certainly have not proved to foreigners that we speak English as correctly and as pleasantly as the English.

Europeans tell me they can pick out Americans anywhere, merely from their hurried speech and harsh voices.

At one time, the Yankee was rather proud of his twang, and was pleased that he carried some mark of distinction wherever he went. All notice was flattery for the man who boasted "we could wallop creation." But that age has passed; we no longer wish to be so *very* different from others. We have begun to be somewhat self critical.

If then, we are markedly deficient in the art of speaking English, there must be a reason, and also a remedy.

Philosophic writers try to explain the beauty of speech of certain nations by pointing to the climatic conditions of the country. Centuries of life in a sunny, genial climate, and a life largely spent out of doors have tended to produce certain qualities of mind and manners in a people that no doubt have influenced favorably their speech. The Italians speak rapidly, but they do not speak hurriedly; they do nothing hurriedly in the sense that we Americans use the word.

On the other hand, people living in an uncongenial climate, such as that of the British Isles during certain parts of the year, might be expected to exhibit certain unlovely qualities of speech, but such is not the case. The Englishman possesses a certain repose of mind, and a leisurely habit of thinking that is reflected in his speech.

It is that absence of hurry and nervous rush that makes it so markedly different from our own. To hear English spoken by such

a man as Forbes Robertson is an education to anyone desirous of learning the possibilities of the language.

It is certainly true that certain peculiarities of American speech may be traced to the influence of our mixed population. The Southern drawl, and the use of words not native to our language may be traced to the influence of the negroes in the South. This is more readily understood when we remember that almost from the settlement of the Southern Colonies the children were brought up by black "Mammies."

But such peculiarities are not in themselves displeasing, and are not the kind that cause American speech to be discredited.

The influence of certain other foreign elements, while seemingly not far reaching are locally very noticeable.

Three counties in Eastern Pennsylvania were settled by Germans, mainly from the Palatine Rhine Provinces, and they brought with them, and maintained, a barbarous German which gradually disintegrated and became mixed with English, producing that linguistic absurdity known as Pennsylvania Dutch.

It would be a mistake to overlook such vagaries as these, for among a people accustomed to travel extensively as we do from one part of the country to another, absurdities of speech are carried like burs, and disseminated in part subconsciously, in part deliberately and are repeated as jokes too good to be withheld. In a smaller city in Pennsylvania, the seat of an important University, some, at least, of the teachers in the public school speak atrocious English, tainted with Pennsylvania Dutch. The Professor of English in the University referred to told me he was one day informed by his children that their school teacher corrected them for not using good English. His little daughter had said to her teacher "May I sit behind Lucy?" "You must not say that," said her teacher, "You should say, 'may I sit in back of Lucy?'"

In this same section of the state the clergymen are almost entirely recruited from the farms and the smaller towns. Their theology acquired in the seminaries may be of the best, but their English is not. Perhaps something is attempted in this line, but little effect seems to have been produced. These clergymen, whose every word is received with reverent attention, and accepted as a model, scarcely speak English at all. They do worse than mis-

pronounce, they actually speak a foreign dialect. Each soft S is made hard, and each hard S is soft; V is W, and W is V.

"Vy did you do it?" "A great man like Julius Seesar."

These expressions have actually been made by public speakers in Pennsylvania. But Pennsylvania is not the only state in which sins are committed against English speech.

The Pulpit of the land should be a great educator of the people, and in many ways it nobly performs this function, but in English—well, that is not so apparent. It is not uncommon to hear in this country eminent preachers grossly mispronounce words. In a few instances I have questioned the preachers in a private interview after the sermon and asked for their authority for this and that pronouncing. In some cases they frankly confessed that they had never had their attention called to the matter, and had no authority to offer. Others affirmed that they considered pronunciation a small matter anyway, and liked their own pronunciation better than those given by the authorities.

Now I am not trying to make out a case against ministers in general, nor do I want to belittle their work or office. I merely mention these facts to show that many of those, who, from the nature of their calling might be among the most potent agents for teaching correct pronunciation, quite generally neglect the opportunity.

A young clergyman of my acquaintance who is gifted with a most beautiful voice has occasion to intone the service in a great church in New York City. Doctor L. spent several years in training himself for this work. His natural speaking tone carries easily a great distance, and no part of any word is lost. The final consonants are hit out distinctly, and give that perfect contour which insures the identity of each word and phrase.

He speaks without fatigue to the end of the longest services in a building, trying, because of its accoustic peculiarities. He tells me that very few of the clergymen in this country have received adequate instruction in voice dynamics and economics. It is quite evident that they do not. What a peculiar thing it is that those whose business or perhaps it sounds less harsh to say, whose life work it is to speak in public, have been given little, if any, training

in that one feature of their work which may make or mar their efforts.

It would seem to require little argument to show that the effectiveness of a preacher is enhanced manyfold if he speak with a cultivated voice, beautifully modulated, clear and melodious in tone production. It has been said that such voices are a "gift," and cannot be made.

People point to the delivery of such a man as Bryan, and thoughtlessly suppose he sprang forth a finished orator the day he fell upon the political public. Never was a graver mistake made. No matter how great or how small one's natural endowment may be, almost anyone may be taught to enunciate clearly and speak effectively.

Some effort is made in this direction in the dramatic schools of this country, but the actors on the American stage who speak English beautifully can be counted on the fingers of one's hands.

The women, as a rule, speak better than the men, but it is a lamentable fact that scarcely any of them speak with the care that in European countries is demanded as a fundamental requisite of all who aspire to a dramatic career.

Anyone fairly familiar with French can catch every word, nay, every syllable and shading of the lines delivered by Mme. Bernhardt. French seems so easy as she speaks it. And she is not the only example of perfect diction on the French stage. There, it is the universal rule. No one would be considered for a moment as competent who could not do so. For centuries the French school of dramatic art has held up the ideals of perfect diction.

Undoubtedly it would be a great help to the cultivation of English speech if we had an authoritative body like the French Academy who could establish rules, and settle disputed points of pronunciation, and which moreover would lend its tremendous influence toward creating and maintaining a lofty standard of excellence in this regard.

We do many things hurriedly, and we have not cultivated reverence for our language. Hurry and carelessness is destroying the beauty of English as a spoken language and the remedy for it, I believe, is to begin with the children in school.

Children can be taught to read expressively. They should first

of all be required to read slowly, to train their eyes and look at the audience at the ends of sentences, and at all natural points of emphasis.

English abounds in hard nuts to crack. There are endless amusing exercises or "stunts" in the pronunciation of different combinations of words, such for example as:

"The sea ceaseth and it sufficeth us."

"Peter Piper picked a peck of pickled peppers."

These children delight to attack. But what is done merely for amusement might be made a profitable means of acquiring a mastery of difficult enunciations, if such tasks were taken seriously and followed up systematically.

The less obvious difficulties consisting of the endings ing, th, er, ur, ir, etc. should receive adequate attention until each consonant ending is hit off with the requisite sharpness to insure distinction and guarantee the identity of each word heard at a moderate distance.

School theatricals might afford a fine occasion to develop a love for artistic utterances, for it is only as we find occasions to use and exhibit our acquirements that there is any incentive to work for their attainment.

In order to set in motion machinery adequate to effect a revolution so vast as the reestablishment of pure English speech in this country, we must look to the Press as a prime mover and director in this matter.

A number of earnest men and women, well qualified for the work of awaking the public to its necessity, and able to teach by precept and example are likewise needed.

Such a holy crusade against inartistic, hurried, slovenly habits of speaking would be likely to succeed in time, and the rewards would be ample, for they would be nothing less than the satisfaction of seeing all America awakened to the glory of English, and the joy of knowing that in place of a national reproach, our manner of utterance would become the admiration of the world.

A Review of Representative Genetic Studies of Number

By Henry B. Howell, Principal P.S. 27, Jersey City, N. J.

III Number Forms

THE TREATMENT of the genesis of the number-sense would not approach completeness without some consideration of the curious phenomenon which often accompanies its beginnings, *viz.*: The occurrence in the consciousness of many children and persisting in that of some adults of a kind of imagery that seems to help out the early strivings of the more or less abstract number series for some sort of symbolic expression. This imagery takes the character of so-called number-forms, and while the evidence of the existence of these forms is taken largely from the testimony of more or less mature persons, yet these usually agree that they originated early in life, many saying that they have always possessed them and expressing surprise at finding that everybody does not possess them.

Several pages of drawings of such forms are to be found in Galton's¹ discussion and in Phillips' article². They are arranged in zigzags or long curves or lines going in different directions, the more important numbers (to the possessor) being situated at the turns. Some of them are very complicated, requiring tri-dimensional space to represent them. The numbers may appear either written or printed and the general mental movement in connection with their appearance is that whenever a number is thought of it appears in the same place on a visual diagram which is invariably called up, viewed by the mental eye, and often definitely located.

(1) F. Galton. *Inquiries into the Human Faculty*. Everyman's Library, 79-105.

(2) D. E. Phillips. *Genesis of Number Forms*. *Amer. Jour. Psychol.* VIII, 1896-97, 506-527.

These diagrams are often very much larger than the drawings. Galton says that the most common way is to see only two or three figures of the diagram at once but Phillips says that this depends upon whether the mind is performing mental calculations or the form is viewed as a whole.

What proportion of people possesses these forms depends upon what extension is given to the term "number." For it is not only in the field of number strictly speaking that diagrams occur. Persons who have no number form have schemes for the days of the week, days of the month, months of the year, letters of the alphabet, etc. In some investigations these, probably altogether different in their origin and explanation, have not been sharply separated from true number-forms. Galton found one in thirty males or fifteen females. Patrick ¹ found one in six adults, a large proportion among children, slightly more common among women than among men. Phillips found that 15% males, 17% females, have *some* forms; 7% males, 8% females have *number* forms.

Galton (1883), Patrick (1893), Flournoy (1893), and later Calkins and Phillips have studied many number forms and published their results. As Phillips' investigation is the latest and takes into account previous results and interpretations, I follow him here in the main.

Phillips formulated a number of questions which he submitted to 332 Normal School students, 974 school children, seventh, eighth, and ninth grades, and 343 miscellaneous adults. The children were asked to draw whatever form or forms they had. In all the rooms, except five, an effort was made to keep them from obtaining an imaginary form for the occasion. Each pupil giving a form was questioned privately; and in the five rooms opportunity was given to fake a form by presenting drawings and giving explanations; but the forms collected in these rooms show no signs of fraud.

The drawings were examined as to their general direction, first turns and endings, and the results tabulated including the drawings collected by Galton, Flournoy and Patrick.

(1) G. T. Patrick. Number Form. Pop. Sci. Monthly XLII, 1893, 504-514.

TABLE

No.	Turn		End						
	To Left	To Right	At 10	At 12	At 20	Below 100	At 100	Above 100	
Forms	263	47	167	91	64	21	109	94	55

The table shows that the large majority turn to the right; out of 263 forms ninety-one make their first turn at ten, sixty-four at twelve; only fifty-five extend beyond 100. "There is at least a suggestion that both the first turning and the limits of these forms may be related to the manner of counting and indicate that their formation begins with the earliest counting."¹

Of 280 answering the question as to the age at which their form first appeared 241 did not remember a time when it was not at call; seventeen say at six years; eleven say they learned to add or multiply on their scheme. Several things in the forms point to the fact that "number forms begin with the naming of numbers and go on as the child learns to count to 100. Most children can count 100 before they can recognize anything written or printed. It is only natural that they should try to visualize the abstract and try to cast it into some concrete form or space relation."²

As to the origin of the particular form possessed by individuals few had any explanation to offer. Some of the simplest forms were ascribed to imaging the clock face or other objects more or less frequently before the eye. Such are only more or less modified mental images and were located on blackboards, books, blocks, etc. This class does not exist to any extent among adults. Is it useful or troublesome?

Two hundred eleven answered this question. Ninety-seven are sure of its utility; one finds it troublesome; 113 neither useful or troublesome. Many, who said at first "neither," afterward corrected this statement by saying they found themselves continually using it. At first they were unconscious of using it, using their form just as language is used as a medium without giving it a thought.

Where is it located?

Diamandi, an Italian mathematical prodigy to whom with others

(1) Phillips, page 516.

(2) Phillips, page 516.

we shall give some attention later, located his on the convolutions of the brain; but the rule is to locate it in space near the head, when located at all. Several did not answer this question and many were not conscious of any localization.

The direction of turn lacks explanation. Right or left handedness is not found to have any influence.

Are they inherited?

Galton emphasized heredity as an explanation and Miss Calkins is also much in favor of heredity but this only pushes the question further back. Flournoy says that only predisposition can be attributed to heredity. Phillips' questionnaire obtained 128 answers to this question. Six relatives had a number form; seventeen relatives had other diagrams. Phillips says, "I find no more signs of, or reason to look for heredity here than in any highly developed power of imagination, memory, art, music, etc., all of which are much questioned since Weisman's theory of heredity."¹

Number forms are not found most frequently, as might be supposed and as Galton thought among the most imaginative; have no connection with love of mathematics, nor with general intelligence. Besides the number forms consisting of lines, straight, curved, spiral, which the (comparatively few) owners say are as distinctly seen as if actually before their eyes, there are many cases in which lines are absent and the arrangement more or less vague the numbers simply being located in a certain direction or at a certain distance or *being felt* to be at differing distances away. Some say the numbers thought of recede, others that they go up, the large ones getting very high. "It seems," says Phillips, "that nearly all persons possess some idea of extension of numbers, more or less indefinite."²

Out of 480 pupils above the seventh grade 74% visualize all mental operations with numbers in some way, and but few had thought it could be otherwise. In the first, second, and third grades 785 children were asked to count and then to tell if the numbers take any direction. The most unexpected directions were asked for first. Thirty-four said they went down; sixty to the right; twenty-nine to the left; seventy-four right forward; 470 some upward movement. The same material is here as in the more definite

(1) Phillips, page 520.

(2) Phillips, page 525.

number forms and many of these are probably as distinct as the complex forms.

All the evidence seems to point to the fact that this manifestation, whether of the sort just described or of the more complex type, takes its rise very early in life, is almost universal among children at a certain primeval stage in their development, drops out in many cases after it has served its initial function, but persists and develops in complexity in a few persons. It seems most probable that it begins with and runs parallel to the establishment of the series idea which, as we have seen, is the background of the number concept. If this be true, it would find in this fact a basis for explanation. It will be remembered that the series idea is developed before number is applied to objects or number names have been learned. Counting in this stage is a motor response to an inner rhythm. But in the absence of number names which later serve to free the motor mechanism by giving it adequate and easily pursued avenues of discharge, the field of response is much restricted. Now the number forms serve as the means of bursting the bounds of these restrictions, and as a kind of concrete symbolism analogous to the sticks, pebbles, etc. of the pre-naming period. The motor impulses find their outlet and their relief in a geometrizing psychosis (doubtless instinctive) which leads to localization in space or imaginary movement along imagined lines which movement, of course, must have a spatial background. We can better understand perhaps how limited the pre-naming period is in available responses and how favorable a time it is for the birth of a more or less fantastic symbolism if we remember that even number names do not long suffice the child; he soon delights in making numberless columns of figures. Prodigies make long calculations before in some cases they can make or read written symbols. It is not surprising to learn that some of them used number forms; these prodigies were in the same stage with reference to available modes of motor response as children before they can make figures.

But number forms, having originated, persist and are sometimes developed after number names and written symbols are freely used. Any collection of number forms shows that most of them are shaped more or less by the relations of numbers to each other. Here they serve the purpose, working through the geometrizing

instinct, of preserving in a visual field, numbers in helpful relations to one another; also to continue a series and to lay it off so that it can be grasped as a whole.

Dr. Hall suggests that it might pay to cultivate in children good number forms as aids to memory and reproduction and thus to the elementary operations. Elements from quite a number of the recorded or yet to be discovered ones might be selected for use at the very beginning in the primary textbooks. Adelia R. Hornbrook claims an advantage in giving to all children a uniform number form by having it constantly hung before them. This was suggested to her by experience with children who had number forms, some of whom performed remarkable operations with their aid. For the number forms used by her, see her article *Educational Review*, Vol. V, No. 5, pp. 467-480.

We have attempted above to state clearly the most probable genetic explanation of number forms. Explanations have been attempted from other points of view all of which Flournoy says are analyzable into two great classes: (a) Psychological, (b) Physiological, harmonizable by the principle of psycho-physical parallelism. These are only of mild interest to the pedagogue and will be omitted.

Testing Capacity and Aptitude of Pupils

WILLIAM ESTABROOK CHANCELLOR

Methods employed in conducting school tests as pictured by a newspaper reporter.

YESTERDAY afternoon a Tribune reporter spent some time with Dr. Chancellor, and suggested that he be given one of the tests. Dr. Chancellor has almost half a hundred problems with which he examines children, according to the grade they are in, but he selected the series used for eighth-grade pupils.

"This first problem is the most simple," said Dr. Chancellor, "but it means a great deal. Draw as well and as quickly as possible twenty circles, marking inside of each four rows of 'o's' and three of 'x's' alternating them, and placing four characters in each row."

When this had been done Dr. Chancellor explained. "This problem" he said, "shows the manual motor time rate and control, economy or waste of output, and power of count. Children in the lower grades use the whole arm movement in making the big circles. They have not acquired control of the secondary muscles in the hand by which they can make smaller circles with their fingers. In this way time rate and control are indicated. Older pupils have control of the secondary muscles and the size of their circles, and the rows of letters, indicates either economy or waste of their output, or energy. This test gives some remarkable data."

The second problem was the copying as quickly as possible of the following: "George Livingston, a man with wife and children, inherited ten thousand dollars from his uncle. With the money he bought a house for \$6,000, and a store with goods for \$4,000. Arthur Eckers, likewise a man with wife and children, also inherited ten thousand dollars. With the money he bought a store for \$7,000, an automobile for pleasure riding for \$1,600; spent \$400 in a trip to San Francisco and back; bought furniture and books

worth \$1,000 for a house that he rented, and put \$2,000 at interest in a savings bank to keep."

Dr. Chancellor said this problem first gave an example of handwriting, and then showed accuracy of record in memory, and also speed in writing. In Johnstown he has found pupils who copied the sentences in three minutes and thirty seconds, considered excellent work.

"For the third problem," continued Dr. Chancellor, "I ask the pupils to write which man expended his inheritance more wisely. I also tell them there was a catch in the sentences, and ask them to point out the error. This problem indicates the varying degree of common sense displayed by the pupils in determining which was the wisest expenditure. The catch or error is having Eckers dispose of \$12,000, while his inheritance was only \$10,000."

The next two problems were to test visual memory, to reproduce something that was given only a fleeting glance. In the school room Dr. Chancellor draws a circle, a rectangle, a square, a cone, an ellipse, an inverted triangle, a plus mark, a sign of multiplication, a sign of division, a sign of subtraction, a dollar mark, and a cent mark. He immediately erases these and asks the pupils to make the signs in the correct order. For the benefit of the children Dr. Chancellor stated that no person in the world can do this problem correctly.

For the second problem in visual memory Dr. Chancellor writes on the blackboard the following: "W. E. Chancellor, Darien, Connecticut, U. S. A." He immediately erases it and asks the pupils to write it correctly. This problem proves much easier.

Auditory memory, the ability to reproduce something read only once, rather slowly and distinctly, is tested in the next two problems. Dr. Chancellor reads the following figures, "479063801520," and asks the pupils to write them correctly. Then he reads these letters, "mlbdfnskcp," and asks that they be written correctly.

"These two problems are fine for the auditory memory span," said Dr. Chancellor. Some pupils can remember only a few. It is easier to get the figures than the letters, as there is a less number from which to select.

The problem following these is one in drawing. A rough sketch of a house, lines drawn crooked and in the wrong perspective, is

made on the blackboard. The children are requested to tell in writing what is wrong with the house, and then to make a correct drawing. There is also a catch in this problem, smoke being drawn downward from the chimney.

The next problem Dr. Chancellor considers the best of all. It is for the association of ideas. "I will give you six minutes to write the names of everything you can think of about a house," says Dr. Chancellor. The word "house" naturally gives rise to an association of ideas that results in just as big a list as the pupil can remember. Girls prove best in this problem, as articles in the house are remembered better by them than by boys. The average number of words for girls is thirty-two, and for boys twenty-two. Dr. Chancellor said in one city he found a sixth-grade girl who wrote 600 words in six minutes, a remarkable record both in association of ideas and speed in writing.

"Do you think a President is better than a King? If so, why? If not, why not?" is the next problem. This is merely a little test in "world news," as Dr. Chancellor terms it, and is unimportant.

The next problem is a test in geography. It reads something like this: "Suppose you had a wealthy uncle, who told you he would give you enough money to live without working, and in any city that you cared to live in. What city would you select, and why?" By this problem the pupils give an idea of their knowledge of different sections of the world.

The last problem is a test to see whether the pupils are visual minded, auditory minded, or of a thoughtful nature. "Suppose you had a friend who offered to take you to a picture gallery this evening, or to a concert, or would loan you a book to read at home. Which would you do?" This problem will determine whether the pupils are influenced by something that appeals to the sight, to hearing, or to the mind.

Vocational Correlation

By T. Vernetta Morse, Chicago, Ill.

IT WAS gala day for the faithful "Artist Artisans" who were laboring for the correlation of art and industry through human ability, when legislative bodies adopted the word "Vocational" as a comprehensive title, covering inclusively, the development of those individual activities required by a nation, in the upbuilding of its industrial and commercial life.

To receive national recognition in any form gives courage to pioneer movements, for it proves conclusively, that the principles on which they are founded have been recognized by the public at large and are being developed in many parts of the country under various names and guises.

The word vocations was first adopted in the art world by a small group of art people in Chicago during the year nineteen hundred, who were discussing the advisability of organizing an association for the promotion of vocational art and industry. The word vocation was selected as a general title that would best include the so-called fine arts as well as the industries. This association was to work for the encouragement of all creative ability and assist the individual to express his ideals in whatever material seemed best suited to his purpose.

That the organization was far in advance of the times goes without saying, but it never swerved from its purpose. Gradually the times changed and it is now a national organization with members in every part of the country.

Of the original group of five who so earnestly discussed the situation, all have passed away, except the writer, but their works and ideals have lived, for they were Daniel H. Burnham, Halsey C. Ives, Frank Millet, and Charles Kurtz. There was never a group of men in all the world with such clear visions of the future and so earnestly devoted to the cause of American art industries.

This group of men were broad enough to see all sides of the question and brave enough to work for it under any and all discouragements. They were co-workers, during the Columbian Exposition. They were always at their posts in rain or shine. There was no problem too large for them to attempt; no detail too small to receive their attention.

They believed in art as a means of human expression. They believed that the correlation of art and science as fundamental principles in all education, would develop an efficient human being capable of expressing itself in terms of both truth and beauty.

These busy men were great in the strength of their belief in the future. Were they living today they would recognize the great progress that has been made during the past year.

Vocational education is at last giving the people a common interest. This common interest is calling for common principles upon which to work. There is no common ground except that occupied by art and science. We are young in both but we are fast learning that they are the simplest, most natural means of solving life's educational problems.

The promotion and uplift of all industrial activity must come through the people. No industry can rise higher than its source. A new education is taking the place of the old forms. In the new education there are no arbitrary laws of academic heritage. The logical issues, and information gained from the past are not lost, but they are being used in a new way. They no longer present a style that must be followed. We have learned to follow, only so far as they are useful and logical in building up the common every day forces of the people in an economical manner.

Human efficiency has become a recognized asset that the world can not afford to ignore. Education of the future may not be as well classified and as academic as that of the past, but it will be far more practical and more easily adapted to individual conditions.

Dr. Dickinson aptly puts this idea into words when she says "Each individual is a great human machine with the wonderful motor power of the brain as the central force of all activity; registering as it does, in the various group cells, all impressions from without, that they may with their communication, one with

the other, be returned to the world through a different view point than the one which gave them birth.

The writer has had unlimited opportunity to study the question in its entirety. The joy of knowing that the movement has now become national is worth the many years of persistent devotion to the cause.

Vocational Education means more than the industries. It means the development of the individual through its means of expression and it should begin in the home.

A nation has but two assets; her people and her raw material. When these are united they express the highest form of national progress.

The hope of every nation is in its public schools. A better understanding of the relationship between human activity and the world's work through the solidarity of public school effort will soon solve one of the greatest problems that has ever confronted the educational world.

Visiting Day

By Fanny Comstock, Hubbardston, Mass.

PROBABLY the reason why some children do not enjoy history is that they do not understand it. To seventh-grade children the condensed statements of the textbook are often mere words, not easily connected with past knowledge, not calling up vivid pictures of what living men accomplished. The discussion of the lesson with a competent teacher helps to connect ideas with the words, and if a part of the discussion can come, before the lesson is learned, there is a great gain; for it is unprofitable to try to commit to memory what is not understood. So I was glad that chance led me to a seventh-grade room when some of this preliminary work in United States history was going on. We perhaps should not expect seventh-year children to feel much enthusiasm over the Missouri Compromise and the acquisition of territory at various times. But good maps helped to give clear ideas, and these children had learned to think, and seemed interested. A boy or girl read a paragraph which was discussed or reproduced from memory. The questions of the teacher reached back to previous work, and showed them that invaluable art of knitting the new with the old, without which our mental furnishings are as useful as pebbles in a bag. Undoubtedly we should gain in most subjects that we try to deal with if we took a little time regularly from recitation to consider the coming lesson, not to remove difficulties, but to show how to attack them.

It was a pretty sight to watch—the different classes playing games at recess in the sunshine under the supervision of their respective teachers. In the seventh grade, to which my attention was chiefly given, the boys and the girls played by themselves. First the girls formed a double circle, with wide spaces for running in and out easily. One chased another about, until she was able to dash in and take her place in front of two girls.

A relay beanbag race was exciting. There were two contestants at a time, with about six beanbags placed in a row for each. At the signal they ran forward, picked up a beanbag and carried it back to girls who took them; then out for another, back with it, and so on. They took the bags in any order, working from either end at will. The temptation to throw the bag part way instead of running all the way back and handing it properly was strong, and in one case a victory won in this way was not counted. During this race and the next, the girls stood lined up in two rows, one behind another, so that the new competitors could start without loss of time as soon as a race was finished.

The second race just mentioned was simply a short run. At the word *Go*, two girls raced to a mark and back. Each put her foot squarely on the goal mark before turning. While two were running, the next two stood stretching forward, ready to dash out at the signal.

The games of the boys seemed similar to those just described, though perhaps a little more vigorously played. The children carried on the games largely without assistance, choosing, forming, and making their own decisions.

In the penmanship which followed recess, the time was largely given to practice for arm movement, new to these children. Probably in no branch have teachers and pupils suffered more inconvenience from frequent changes than in penmanship. Great credit is due the teachers for the good results that they secure in spite of all difficulties. It was while watching this work that I noticed a placard which seems to be needed in every schoolroom and every library, as well as in many homes. "Do not wet your fingers from your mouth to turn the leaves of books or to handle any object." The hygienic reason for this rule should be firmly impressed on the minds of the children.

In a fifth and sixth grade room, letters of invitation were being written. Each had written independently an invitation to a friend to come for a visit. After the first day's work it had been discussed, and corrections had been indicated when necessary, so that the class were ready for a second careful writing. I saw work on advertisements that had been done earlier. The advertisement chosen had been cut from the newspaper and pasted at the

head of the sheet. As far as I observed they were of a nature to interest the children, and not too remote from their possible needs. Office boys and stenographers, errand boys, salesmen, and general housework figured among them. The answers were short and gave the necessary information well. Another attractive subject was: "My Favorite Place," which one had changed to "My Pine Needle Grove." Such topics are likely to awaken the childish love of nature, which is sometimes dormant, though often strong. Other subjects were: "My Little Friend," "My Sister," and "My Aunt Bessie," evidently derived from pictures.

In an eighth-year history recitation a generous use of reference books for study was shown, and the habit of dwelling upon causes and results. Pupils were expected to have an opinion and to state it with tolerable clearness, at the same time that mere guessing was discouraged by keeping authorities in sight and in mind.

I found another eighth-year division reading "The Merchant of Venice," taking the parts with enjoyment and appreciation. Incidentally they gave a good brief outline of what each act of a play is supposed to do. When we think of the large number of pupils who never reach the high school, we see how important the grammar school study of master-pieces becomes. It is much to be desired that children should own the copies of classics which they study at school. A different attitude results immediately, if the child owns his book. He respects the book and is more likely to prize its contents. Would it not be well for teachers to suggest the matter of individual ownership for those who wish to purchase their books? If this is felt to be objectionable for any reason, we can at least encourage the formation of personal libraries and refer to the complete Longfellow or Shakespeare to be bought by and by with one's own money, and other favorite books that must stand on the shelves.

The visitor is always glad to see a good fire drill. It is a wise regulation to require it to be given so frequently that the children are entirely accustomed to it, and take it cheerfully like any other school exercise, with apparently little thought of danger. Are there not some teachers not compelled by any power outside of themselves to take this wise precaution, who can introduce it of their own initiative?

Choosing sides is an old device to introduce rivalry and thus quicken interest in a study. Spelling was the subject in which it was formerly most practiced, but many teachers find it a useful aid in other subjects. I once saw a spirited contest over geographical facts in the British Isles. It is true that less emphasis is placed on memory work in geography than in earlier days, but we sometimes feel that we have gone to an extreme in that direction, and that it is convenient to have a few capitals and rivers and boundaries stored away for quick references. Drills in arithmetic are well adapted to choosing sides, especially quick oral work. Probably many teachers use this method occasionally for quick mental work in finding the percentage, base, and rate.

The Secret of Success

He rose to fame and grand success,
And men at once began to guess
The secret of his rapid rise—
(It was to all a great surprise).
They called it luck; some few folks are
Born beneath a lucky star.
They called it pull; he used his friends
To consummate his selfish ends.
They called it graft; no honest man
Could operate on such a plan!
Some one, at last, suspicioned that,
It was the brain beneath his hat.

The Social Education of the Public School Teacher

By Mary V. Barnhurst, Philadelphia, Pa.

THE public school, through its progressive leaders, is evolving new methods for meeting the complex social conditions of the twentieth century. These new methods are being devised by educators in response to the demands of an age in which the necessities of race survival compel social adjustment. In art, industry, government, law, religion and in public education the twentieth century demands social adjustment.

Intelligent social adjustment can not exist without social knowledge. Social knowledge is advancing rapidly, but is still a possession of the few. In consequence of this fact, the path of progress is strewn with wrecks of reform movements based on emotionalism. Poverty persists to an alarming extent in this age which possesses sufficient knowledge about eugenics, prevention of diseases and accidents, protected childhood and motherhood, elimination of vice and crime, social insurance, housing reform, industrial and agricultural training, and social religion to bring normality and happiness to the masses provided the facts could be widely disbursed and applied.

The public school is the hope of progress. It contains one or more representatives from a majority of the families in the United States, totaling about nineteen and one-half millions of the future citizens of the commonwealth. It is therefore the logical channel for the assimilation and distribution of this body of scientific social knowledge which is of vital importance to society.

Social knowledge can never become universal until social education becomes a part of the equipment of every public school teacher. Social education becomes useful only when converted into deeds, but it is the essential antecedent of social service, and the

training in the social sciences which it implies is of paramount importance to the educator.

In response to the demands of sociologists, social workers and progressive leaders of education for a socialized school, the following bibliography has been compiled for publication.

(Compiled by Professors of Economics and Sociology of the University of Pennsylvania, assisted by Prof. Edward T. Devine of Columbia.)

SUGGESTED LIST OF READINGS ON SOCIAL PROBLEMS

General:

The Survey. (Best source of current information on all social topics)
Published at No. 105 East Twenty-second Street, New
York.

"Guide to Reading in Social Ethics and Allied Subjects"
(Critical estimates of leading publications)
Cambridge, Mass., Harvard University.

Peabody—"The Approach to the Social Question"
New York: Macmillan Company.

Allen—"Efficient Democracy"
New York: Dodd, Mead & Company.

Patten—"New Basis of Civilization"
New York: Macmillan Company.

Seager—"Social Insurance"
New York: Macmillan Company.

Nearing—"Social Adjustment"
New York: Macmillan Company.

Ellwood—"Sociology and Modern Social Problems"
New York: American Book Company.

The Church and Social Problems:

Stelzle—"The Church and Labor"
Boston: Houghton, Mifflin Company.

Rauschenbusch—"Christianity and the Social Crisis"
New York: Macmillan Company.

Earp—"The Social Aspects of Religious Institutions"
New York: Eaton & Mains.

Merrick Lectures 1907-8—"Social Application of Religion"
New York: Eaton and Mains.

Thompson—"The Churches and the Wage-earners"
New York: Charles Scribner's Sons.

Public Health:

- Hutchinson, Woods—"Preventable Diseases"
Boston: Houghton, Mifflin Company.
Allen—"Civics and Health"
Boston: Ginn and Company.
Dock—"Hygiene and Morality"
New York: G. P. Putnam's Sons.
Veiller—"Housing Reform"
New York: Charities Publication Committee.
Lee—"Constructive and Preventive Philanthropy"
New York: Macmillan Company.

Problems of Poverty:

- Devine—"Misery and Its Causes"
New York: Macmillan Company.
Warner's American Charities—N
New York: Crowell and Company.

Child Problems:

- National Child Labor Committee—Publications.
No. 105 East Twenty-second Street, New York.
Newman—"Infant Mortality"
London: Methuen and Company.
Mangold—"Child Problems"
New York: Macmillan Company.
Adams—"The Spirit of Youth"
New York: Macmillan Company.
Folks—"The Care of Dependent, Neglected and Delinquent Children"
New York: Macmillan Company.
Reeder—"How Two Hundred Children Live and Learn"
New York: Charities Publication Committee.

The Crime Problem:

- Travis—"Young Malefactor"
New York: Crowell and Company.
Wines—"Punishment and Reformation"
New York: Thos. D. Crowell Company.
Parmelee—"The Principles of Anthropology and Sociology in their Relations to Criminal Procedure"
New York: Macmillan Company.

Labor Problems:

- Addams & Sumner—"Labor Problems"
New York: Macmillan Company.
Brooks—"Social Unrest"
New York: Macmillan Company.

Kelley—"Some Ethical Gains through Legislation"
New York: Macmillan Company.

Race Questions:

Leupp—"The Indian and His Problems"

New York: Charles Scribner's Sons.

Steiner—"On the Trail of the Immigrant"

New York: F. H. Revell Company.

Washington—"Up from Slavery"

New York: Doubleday, Page and Company.

Commons—"Races and Immigrants in America"

New York: Macmillan Company.

The Audubon Plan of Instruction in Bird Study

THE sum of \$15,000 has been contributed to the National Association of Audubon Societies for the purpose of helping teachers to give simple instruction in bird study to their pupils during the year 1914. The Audubon plan of helping teachers in this connection is as follows:

Any teacher or other person who will interest not less than ten children in contributing a fee of ten cents each to become Junior Members and will send this to the office of the National Association, will receive for each child ten of the best colored pictures of wild birds which have ever been published in this country. With each one of these ten pictures goes an outline drawing intended to be used by the child for filling in the proper colors with crayons. Each picture is also accompanied with a four-page leaflet discussing the habits and general activities of the bird treated. Every child also receives an Audubon button. The cost of publishing and mailing this material is a little more than twice as much as the child's fee.

The teacher who forms such a class receives without cost to herself one full year's subscription to the beautiful illustrated magazine "Bird-Lore." This is the leading publication in the

world on bird study. To the teacher also there is sent other free literature containing many hints on methods of putting up bird boxes, feeding birds in winter and descriptions of methods for attracting birds about the home or school house.

The ten subjects supplied to children this year are as follows: Nighthawk, Mourning Dove, Meadowlark, Flicker, Sparrow Hawk, Screech Owl, Purple Martin, Cuckoo, Hummingbird and Robin.

Endorsing this work, Dr. P. P. Claxton, United States Commissioner of Education, says: "I consider the work of the Junior Audubon Classes very important for both educational and economic results, and I congratulate you upon the opportunity of extending it. The bird clause in the Mosaic Law ends with the words 'That it may be well with thee, and that thou mayest prolong thy days.' The principle still holds. I hope that through your efforts the American People may soon be better informed in regard to our wild birds and their value."

In 1913 school children to the number of 53,157 availed themselves of this opportunity. Hundreds of enthusiastic letters have been received from teachers.

As long as the Association's special fund for this work holds out this offer is open to any teacher in the United States or Canada. Any teacher reading this notice may immediately form a class, send in the dues and receive the material, or further information will be gladly furnished upon request.

T. GILBERT PEARSON, Secretary,
1974 Broadway, New York City.

The Social Center Movement

A LIST of seventy-one municipalities having some paid social center workers has just been published in a report compiled by Clarence Arthur Perry of the Russell Sage Foundation Department of Recreation.

It includes the following cities:

California	Massachusetts	New York
Los Angeles	Boston	Buffalo
Santa Rosa	Cambridge	Geneva
Colorado	Chicopee	New York
Denver	Dedham	Niagara Falls
Pueblo	Gardner	Rochester
Connecticut	Malden	Saugerties
Stamford	Natick	Schenectady
Waterbury	Winchester	Watertown
Illinois	Worcester	North Dakota
Chicago	Michigan	Grand Forks
Evanston, D.76	Detroit	Ohio
Oak Park	Grand Rapids	Canton
Ottawa	Kalamazoo	Cincinnati
Rockford	Pontiac	Columbus
Indiana	Minnesota	Hamilton
Crawfordville	Minneapolis	Youngstown
Gary	Red Wing	Pennsylvania
Mishawaka	St. Paul	Philadelphia
Iowa	New Jersey	Pittsburgh
Burlington	Bloomfield	Reading
Des Moines	East Orange	Rhode Island
Sioux City	Elizabeth	Newport
Kansas	Englewood	West Virginia
Leavenworth	Jersey City	Wheeling
Kentucky	Montclair	Wisconsin
Louisville	New Brunswick	Kenosha
Louisiana	Passaic	Milwaukee
New Orleans	Paterson	Oshkosh
Maryland	Trenton	Superior
Baltimore		West Allis

Concerning the social center movement throughout the country the Russell Sage Foundation report shows that in places where it has already started the rate of growth is much higher than the rate at which it spreads in new localities. In other words, the actual results of the social center are more effective in getting public support than the words of its most enthusiastic champions.

The work is getting on a more solid basis. Seventy-one cities had, during the winter of 1912-13, paid workers for some form of social center activity, as opposed to 44 the previous season, and the amount expended in the maintenance of school centers has grown from \$139,535 in 1912 to \$324,575 in the past year. There are 1927 paid workers reported. This, with the volunteer workers, brings the number of persons engaged in social center direction considerably above the 3,000 mark.

That the general social and recreational possibilities of the "wider-use-of-the-school-plant" movement are making a constantly greater appeal, may be seen from the fact that in 981 schoolhouses there were public entertainments and lectures; in 496 school buildings there were open meetings of adults to discuss local problems; athletics or folk dancing in 474 schools; and social dancing in 190.

A notable development of "wider use" in 1912-13 was for election and other civic purposes. Ballotting during elections took place in 529 schoolhouses; 259 buildings were used for registering voters; and political rallies to the number of 481 took place in school edifices.

Mr. Perry reports great difficulty in obtaining exact statistics of social center activities. Little uniformity of agreement exists as to what constitutes a social center. Even the name itself is not constant—the institution is variously reported as "recreation center," "civic center," "social and recreation center," "evening center," "community center," etc. Some cities have social center activities going on six nights a week, while others open their school buildings once or twice a month.

We should, however, look beyond the mere figures in judging social centers, says Mr. Perry. "Centers of individual growth and refinement, of civism and social integration—that is what these places are, and no system of numerals can ever be devised that will convey an adequate notion of the vitalizing influences which radiate from them."

Literary Snapshots

By Mary Eleanor Kramer

EDWIN GINN, founder and head of the house of Ginn & Co., died on January 21st. He was born at Orland, Maine, on Feb. 14th, 1838. Soon after receiving his degree from Tufts college, he established the school-book publishing business of which he remained the head for nearly half a century. Besides performing a notable service in raising and maintaining the standards for school and college text-books in this country, Mr. Ginn was actively interested in various public-spirited movements—in particular the cause of international peace. Of late years a large share of his time and fortune have been devoted to the World Peace Foundation, of which he was the founder. Great as is the loss which the American publishing trade sustains in his death, the loss to American citizenship is far greater.

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Stewart Edward White is a Westener and will have his little joke on the Eastern Tourist. When he returned from the African tropics, recently, he told of a joke he played one day on some tourists who were poking about the grounds of his Santa Barbara, California, home.

"The party I have in mind came right into the garden without the slightest bashfulness," said Mr. White. "But I got rid of them pretty quickly. Sam Adams, (Samuel Hopkins Adams, you know) was staying with me. We were sitting on the veranda when they came ambling up through the garden. I winked to Adams, seized him by the collar and ran him down the steps (he's about twice my size, you know) shouting at the top of my lungs, 'Just because you have read one of my books you needn't think you can come and camp out on my veranda.'

"You should have seen those tourists sneak off!"

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Ellen Glasgow, the author of "Virginia," lectured in New York on February 17th. The subject of Miss Glasgow's address, which

was delivered before the League for Political Education, was "The Three Ages of the English Novel."

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Helen Keller's ready wit is shown by an incident from her lecturing tour. In these lectures the audience is given the opportunity to ask questions which are passed on to Miss Keller through her teacher, Mrs. Macy.

"Do you play any instruments?" was one of the questions put to her recently.

"Only the hand-organ," came the quick reply throwing out both hands.

Indeed her hands are very wonderful—any one who has ever seen them will not forget them. One of the most interesting chapters of "Out of the Dark," her latest book, deals with "The Hand of the World."—(Out of the Dark, by Helen Keller. Doubleday Page Co.)

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Scribner's for February begins the publication of a new series of recollections by Madame Waddington, the American-born wife of the distinguished French diplomat. This instalment covers the Berlin Congress of 1877-78. In addition to George E. Woodberry's articles on Northern Africa, one of the leading travel articles of the number is Sir Henry Norman's "The Alpine Road of France," describing the best motor-way across France from Normandy to the Mediterranean by the new "Route des Alpes." This issue is largely a motor number.

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Mr. Brand Whitlock's reminiscences of the men and events with which he has been associated, which recently appeared as a serial in the American magazine, are to be published at once by Messrs. Appleton in a volume entitled "Forty Years of It."

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Three popular "Atlantic Monthly" serial features of the past few months soon to appear in book form are Mr. Gamaliel Brad-

ford's "Confederate Portraits," Mrs. Elinore Rupert Stewart's "Letters of a Woman Homesteader," and the "Annals and Memoirs of the Court of Peking," by Messrs. Bland and Backhouse.

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One of the really helpful books of the day for teachers is Eleanor Marchbank's "School Ethics." All who have the training of children in their care will find this little book not only an inspiration to higher ideals, but also a direct aid in daily work.—(School Ethics by Eleanor Marchbanks. The Four Seas Co.)

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"How many Kipling lovers," asks a publisher's note, "know that he was christened Joseph Rudyard Kipling?" Like George Bernard Shaw and Thomas Woodrow Wilson, Mr. Kipling has shown his sense of the value of words by lopping off the uninteresting praenomen. The origin of his better known name is interesting. Lake Rudyard is a beautiful sheet of water in North Staffordshire. It was at a picnic at Lake Rudyard that young Lockwood Kipling first met Miss Macdonald, his future wife. They commemorated that happy event by giving their son the name of Rudyard.

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Marguerite Merington has added to her Play Series a little volume of "Festival Plays." It contains half a dozen one-act pieces founded on fairy tales and legends, celebrating Christmas, New Year's Day, Easter, Hallowe'en, and A Child's Birthday. They are of especial interest to the young, and several of them, like "Father Time," and "Princess Moss-Rose," are very cleverly constructed and phrased.—(Festival Plays, by Marguerite Merington. Duffield & Co.)

* * * * *

Miss Eleanor Hallowell Abbott, in private life Mrs. Fordyce Coburn, the wife of a Lowell, Mass. physician, author of "The White Linen Nurse," "Molly Make-Believe," and many popular magazine stories, turns for recreation almost entirely to outdoor

life. She is especially fond of hunting, fishing, tennis and horse-back riding.

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Teachers in the elementary and upper grades will be delighted with the Kipling Readers. The charm of Mr. Kipling's imaginative literature is such that it makes a delightful appeal to young readers. Every child is bound to love the tales of "How the Camel got his Hump," and "The Elephant Child's Trunk," and the illustrations are from Mr. Kipling's own pictures, made by him for the "Just-So Stories" with charming explanations to accompany them.—(The Kipling Reader for Elementary and for Upper Grades. D. Appleton Co.)

* * * * *

Dr. David Starr Jordan, author of "War and Waste" (Doubleday, Page Co.) is on a six months' peace crusade in the chief cities of Europe prior to the international celebration next summer of 100 years of peace between England and America. He has lately returned from the Balkan peninsula where he wrote an article for the Bulgarian press on "Bulgaria in the Eyes of Europe."

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One of the most helpful of the many yearly almanacs issued by publications is that of The Christian Herald. This almanac is full of interesting and timely material, and is given as a premium for new subscribers of The Christian Herald.

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A book which will delight teachers, parents and children alike is Martha Foote Crow's "Harriet Beecher Stowe." Here this wonderful woman is seen in the home-making side of her life. Emphasis is laid upon her childhood in the Connecticut hills, where the New England traditions of an earlier and more strenuous day had not yet faded out. Her pathetic struggles with poverty and her brave endeavors during the early years of her home-making life, her housewifely labors and her early efforts are described with

inspiring realism. (Harriet Beecher Stowe by Martha Foote Crow. D. Appleton & Co.)

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Dr. Clara Barrus, who for some time has been secretary to Mr. John Burroughs, has written a book entitled, "Our Friend John Burroughs," which will be published during the Spring by Houghton Mifflin Co.

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Leading Periodical Topics, of interest to teachers:

Scribner's—North Africa and the Desert. The Alpine Road of France. French Court Memories. Motorizing Highway Commerce.

Review of Reviews—Development of the Aeroplane and the Dirigible, American Woman and Her Home on a Business Basis. The Income Tax. New York City's Government by Experts.

Atlantic—Athletics and Morals. Athletics and the College. Athletics and the School. From Bend to Burns. Reactions of a Traveller in Egypt. Genius at School. In New York with Nine Cents. The Street.

Everybody's—Better Business, III. A National Museum of Safety. City Salvation and St. Paul. Temperament and the Stage.

Harper's—The Too Adaptable American. A Philosopher in Central Park. A Northern Woman in the Confederacy. A Trooper of Queensland.

The Century—The Boy Who Goes Wrong. New Hope for the Convict. Forbes-Robertson, an Appreciation. Racial Consequences of Immigration. The Heart of India. Lincoln's Social Ideas. The Mexican Menace. The World's Last War.

Metropolitan—With Villa in Mexico. A Cure for Corruption. Joseph Pulitzer. The White Slave Agitation.

McClure's—Autobiography of S. S. McClure. A Great Jew. New Types of Acting.

Cosmopolitan—The Wartime Story of General Pickett. Whitman: Peerless Prosecutor. Zorn: Painter of Strength and Beauty.

American—The Majesty of the Law. Finger Tests of Literature. American Gambling and Gamblers. Seeing America. A Veteran Showman. New York's "Story Lady." A Poor Man's Bank.

The Bookman—Literary Weimar. The North Country as a Background for Fiction. Who is the Man? Building a Play Backward. The Man Who Wrote "Old Folks at Home."

St. Nicholas—The Story Corner. Hans and The Dancing Shoes. Under the Blue Sky. With Men Who Do Things. My Friends the Grizzlies.

A Spiritual Anthology

In *The Spiritual Message of Literature*, the author, Kenneth Sylvan Guthrie, gives evidence that he has traversed vast stretches of the world's best literature, and that in his travels he has had a mind for the inner meaning of things. Book IV interprets the message of great dramas in a comprehensive manner. From Job to William Vaughn Moody's "Masque of Judgment" and Wilbrandt's "Master of Palmyra" the prophets seem to conspire in one great spiritual lesson of spiritual culture—the "culture" implying divine discontent and the word "spiritual" insisting that God is yet to be all in all.

1000 Pertinent Literary Queries

By Mary Eleanor Kramer

(Continued)

201-300

- 201. When did the use of postage stamps begin in the United States?
- 202. Who wrote "Venetian Life"?
- 203. When was the famous "Soros Club" in New York founded?
By whom?
- 204. What American novelist married a Russian nobleman?
- 205. Who said:
 "No coward soul is mine,
 No trembler in the world's storm-centered sphere;
 I see heaven's glories shine,
 And faith shines equal, arming me from fear."
- 206. Who wrote "Following the Star"?
- 207. Who wrote "Old Mobile"?
- 208. Who said: "Truly wise you are not unless your wisdom be
 constantly changing from your childhood to your death"?
- 209. What and where was "Paradise Flat"?
- 210. Who wrote "Old Chester Tales"?
- 211. Who wrote "Meadow Grass"?
- 212. Who wrote "The Memoirs of a Baby"?
- 213. Where do we find the following literary characters: "Priscilla Mullins"; "Jo Marsh"; "Bob Cratchit"; "Bill Sykes";
 "Little Billie"; "Angel Claire"?
- 214. What writer said of his first book: "Like the boy with the
 measles, I am sorry for it in spots"?
- 215. Who wrote under the pen-name of "H.H.B."?
- 216. Who was called "The Gifted Boy"?
- 217. Who wrote "The Spy"?
- 218. Who was the author of the famous hymn "One Sweetly
 Solemn Thought"?
- 219. Who was the founder of the "Woman's Christian Temperance Union"?

220. Who was the founder of the "International Sunshine Society"?
221. What American poet began the translation of the "Iliad" in his seventy-first year, completing that and the "Odessey" in six years?
222. Who was America's greatest humorist?
223. What American writer adopted as her life motto the words: "Hope and keep busy"?
224. Who wrote the "Bimbi Stories"?
225. Where is the "Red Horse Inn"? For what noted?
226. In what work does Sir Walter Scott describe an old-time English Christmas?
227. Who was the author of "Poor Richard's Almanac"?
228. Who wrote "Tam O' Shanter"?
229. What and where is "Elmwood"?
230. Who said:
"We shape ourselves, the joy or fear,
Of which the coming life is made,
And fill our future atmosphere,
With sunshine or with shade"?
231. Where was "Columbia, the Gem of the Ocean" first sung?
232. Who wrote "Marching Through Georgia"?
233. Who wrote "Dixie"?
234. Who wrote "Home, Sweet Home"?
235. Who wrote "Brown, of Ossawatimie"?
236. For what was "Mill Grove Farm" famous?
237. What writer speaking of himself said: "My life is a lovely story, happy and full of incident"?
238. What American writer used many pseudonyms, among them that of "Jonathan Oldstyle"?
239. Who said: "It was Irving, not Hudson, who truly discovered this (the Hudson) river and gave it to us"?
240. Who wrote "An Order for a Picture"?
241. Who wrote the following:
"Be mine some simple service here below,—
To weep with those who weep, their joys to share,
Their pain to solace, or their burdens bear;
Some widow in her agony to meet;

Some exile in his new found home to greet;
To serve some child of Thine, and so serve Thee,—
So here am I; to such a work send me.”?

242. Who said “Hitch your wagon to a star”?
243. Who said: “Sweet mercy is nobility’s true badge”?
244. What American poet wrote a series of newspaper articles under the signature of “Benj. F. Johnson, of Boone”?
245. Who wrote “Trilby”?
246. Who was “Mr. Dooley”?
247. Who wrote: “Pigs is Pigs”?
248. What writer wrote a most interesting narrative of his experiences during the Civil War, under the title of “A Rebel’s Recollections”?
249. Of what American humorist was it said: “He saw life as through a glass brightly”?
250. Who wrote “The Blue Bird”?
251. Who wrote “Ben Hur”?
252. Who wrote “A Hoosier Chronicle”?
253. Where do we find the petition:
“Lord send a man like Robbie Burns to sing the song o’ steam”?
254. Who wrote “If Christ Came to Chicago”?
255. Who is the author of the following expression: “Let this hallowed hour with better thoughts be spent”?
256. Who wrote “Ben Bolt”?
257. Who wrote “Calumet K”?
258. For what is the “Clock House” noted?
259. For what is “Talbothays” noted?
260. Who has immortalized Cape Cod in fiction?
261. Who wrote “The Garden of Allah”?
262. Who wrote “The Moonstone”?
263. For what is Casa Guida noted?
264. Who wrote “Soldiers of Fortune”?
265. Who first introduced the Ghetto into literature?
266. Who wrote “Songs from the Ghetto”?
268. Who was “Eli Perkins”?
269. Who was “The Hawkeye Man”?
270. Who was “Josh Billings”?

271. Who wrote "Christmas Treasures"?
272. Who was "David Harum"?
273. Who was called "The Beecher of England"?
274. What notable work on slavery was published in nineteen different languages?
275. Who wrote the following:
"Like a blind spinner in the sun,
I tread my days;
I know that all the threads will run
Appointed ways;
I know each day will bring its task,
And, being blind, no more I ask."?
276. Who wrote:
"Heighho! Daisies and buttercups!
Mother shall thread them a daisy chain"?
277. Who said: "Love is the only bow on life's dark cloud. It is the morning and the evening star"?
278. Who said: "Whoever first makes a religion out of Democracy, will save a world"?
279. Name two American writers who were class-mates at Bowdoin college.
280. Who wrote "O Captain! My Captain!"?
281. Who was the "Maid of Orleans," and who immortalized her in a drama?
282. Who designed the statue of "The Minute Man" at Concord, Mass.?
283. Who wrote the following:
"Not what we give, but what we share—
For the gift without the giver is bare,
Who gives himself with his alms feeds three,
Himself, his hungering neighbor and me"?
284. What English poet referred to the late Queen Victoria as, "The little old widow at Windsor"?
285. Who said: "Each can have what inspiration each will take"?
286. What English author was knighted because of his defense of the English government, in his book, "The Great Boer War"?
287. For what was "Terre's Tavern" noted?

288. What is "Toynbee Hall"?
289. Who wrote "My Little Sister"?
290. What great English novelist was born in India?
291. What American poet penned the following lines in memory of Wilkie Collins:
- "Yet I believe that kindly death
Reserved for him a welcoming shade—
It seems so natural for his soul
To meet a mystery unafraid."?
292. Who wrote "Widcome Fair"?
293. Who wrote "Peg Woffington"?
294. Name four prominent literary men, who in direct succession, edited the school magazine of St. Paul's School, Concord, Mass.?
295. Who was termed "The Poet of the Sierras"?
296. Who was the creator of "Susan Clegg"?
297. What American novelist wrote a delightful story depicting Holland, and yet never visited Holland?
298. What American poet wrote her first book, "This, That and the Other," when but eighteen years of age?
299. What American poet had so great an admiration for Joseph Jefferson, that he declared he would rather be Jefferson than anyone else in the world?
300. Where do we meet the following literary characters: Jane Eyre; Hester Prynne; Marion Holcombe; Rhoda Gale; Katerina Maslova?
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Answers to 1000 Pertinent Literary Queries

(Continued)

101. Eugene Field was known as "The Children's Poet."
102. "Oak Knoll" was the home of the cousins of John Greenleaf Whittier, and here the genial "Quaker Poet" spent many happy summers.
103. Phillips Brooks wrote "Everywhere, Everywhere Christmas To-night."
104. "Orchard House," Concord, Mass., was the home of the Alcott family; here Louisa M. Alcott wrote "Little Women."
105. William Ellery Channing was called "The Sweet Singer."
106. Elizabeth Hoar was named by her friends, "Elizabeth the Wise."
107. "Ponkapog" was the summer home of Thomas Bailey Aldrich, it is located near Canton, Mass.
108. The rugged beauty of Graylock Mountain has been sung by Holmes, Thoreau, Bryant, Fanny Kemble and Hawthorne.
109. Alfred Tennyson was the author of the lines:
"Great deeds cannot die;
They with the sun and moon renew their light
Forever, blessing those that look on them."
110. Paul B. Du Chaillu wrote "The Land of the Midnight Sun."
111. Stephen Crane wrote "The Red Badge of Courage."
112. Fitz Greene Halleck in memory of his friend, Rodman Drake, wrote the lines:
"None knew him but to love him,
None named him but to praise."
113. Griff House was the childhood home of George Eliot.
114. Old Washington Hall, New York City, was the meeting place of a coterie of literary men, composed of Cooper, Bryant, Verplanck, Sands, Halleck and others, known as the "Bread and Cheese Club," because in their voting for membership, bread was used for affirmative and cheese for negative ballots.

115. Bret Harte wrote "The Luck of Roaring Camp."
116. "Craigdarrock" was the home of Annie Laurie.
117. Ella Wheeler Wilcox resides in a double cottage, known respectively as "The Bungalow" and "The Barracks."
118. Kate Douglas Wiggin wrote "The Bird's Christmas Carol."
119. Walt Whitman selected his own burial spot and designed his own sepulchre.
120. The "Little Nell" of Dicken's "Old Curiosity Shop" was Mary Hogarth, a beloved younger sister of the novelist's wife, and oftentimes an inmate of his home. She died in early maidenhood, and the epitaph which marks her grave-stone was penned by Dickens; it reads as follows: "Young, Beautiful and Good; God in His mercy numbered her among His angels at the early age of seventeen."
121. Dicken's pseudonym "Boz," was derived from his little sister's pronunciation of "Moses," a nickname he had given his younger brother.
122. Charles Lamb said, "I lose myself in other men's minds."
123. Harriet Beecher Stowe wrote "Old Town Folks," said to be an authentic description of early New England life.
124. Benjamin Franklin, in 1731, suggested to the members of the "Junto" club, that they keep their books together so that all the members might have access to them—the public library of today is the outcome of this experiment.
125. "Sunnyside," the home of Washington Irving, was covered with English ivy, the original plant of which was given him by Sir Walter Scott, from that grown over the walls of his home at Abbotsford, Scotland.
126. Cripplegate Churchyard is famed as the burial place of John Milton.
127. The book of "King Arthur" is said to stand for chivalry in full flower.
128. The Book of "Don Quixote" is said to stand for the decline and fall of chivalry.
129. The named heroes of fiction are found in the following works: "Ulysses" in Homer's "Iliad" and "Odyssey." "Falstaff" in Shakespeare's "Henry IV." "Leatherstocking" in Cooper's "Leatherstocking Tales." "Jean Valjean" in Hugo's

- "Les Miserables." "Uncle Remus" in Joel Chandler Harris' "Nights with Uncle Remus."
130. The named heroines of fiction are found in the following works: "Becky Sharp" in Thackeray's "Vanity Fair." "Dora" in Dickens' "David Copperfield." "Minnehaha" in Longfellow's "Songs of Hiawatha." "Gloria Quayle" in Hall Caine's "The Christian." "Annabel Lee" in Poe's "Annabel Lee."
131. Arthur Hallam was the beloved friend of Alfred Tennyson's youth. His death was the inspiration for Tennyson's great poem, "In Memoriam."
132. Thomas Campbell wrote "The Battle of Hohenlinden."
133. James Russell Lowell said of the "House of Seven Gables": "Hawthorne's 'House of the Seven Gables' is the most valuable contribution to New England history that has yet been made."
134. Lord Byron wrote "The Battle of Waterloo."
135. Charles Kingsley wrote "Hypathia."
136. Ralph Waldo Emerson wrote the following lines:
- 'Tis not in the high stars alone,
Nor in the cup of budding flowers,
Nor in the red-breast's mellow tone,
Nor in the bow that smiles in showers,
But in the mud and scum of things,
There alway, alway something sings."
137. The "Old Manse" is located in Concord, Mass., and was the home at one time of Emerson, and later of Hawthorne.
138. Alfred Tennyson said, "I am a part of all I have met."
139. Charles Dickens wrote "Pickwick Papers."
140. Cheyne Walk, Chelsea, London, was the home of George Eliot at the time of her death, which occurred December 22, 1880. Her body was interred in Highgate Cemetery.
141. William Makepiece Thackeray was a noted caricaturist.
142. Craigenputtock was the home of the Carlyles, here they lived for many years, and here they entertained Emerson, Longfellow and many more noted literary people.
143. Daniel Defoe wrote the lines:
- "Wherever God erects a house of prayer,

- The devil builds a chapel there;
And, 'twill be found upon examination,
The latter has the largest congregation."
144. John Dryden said: "None but the brave deserves the fair."
145. John Milton was three times married; his first wife was Mary Powell; the second, Katherine Woodcock; the third, Elizabeth Minshull.
146. Isaak Walton wrote "The Complete Angler."
147. Shakespeare in "A Winter's Tale," said:
 "One good deed dying tongueless
 Strangles a thousand, waiting upon that."
148. Kilcolman was the home of Edmund Spencer.
149. Geoffrey Chaucer was termed "The Father of English Poetry."
150. Plato said, "Self-conquest is the greatest of all victories."
151. Alice Cary was called "The Jean Ingelow of America."
152. Mrs. G. R. Alden wrote under the pen-name "Pansy."
153. Nathaniel Hawthorne was the author of "Marble Faun."
154. George Bancroft established the naval academy at Annapolis, Md.
155. J. G. Holland is the author of the words:
 "Silence is vocal, if we but listen well,
 And life and being sing in dullest ears
 From morn to night, from night to morn again
 With fine articulation."
156. Ralph Waldo Emerson said of Bronson Alcott, "He is the most refined and the most advanced soul we have had in New England, he makes all others appear slow and cheap and mechanical."
157. George Washington said, "Liberty, when it begins to take root, is a plant of rapid growth."
158. "Woodland Hall" was the little building in Concord, Mass., in which Bronson Alcott established his famous School of Philosophy.
159. Gene Stratton Porter wrote "Moths of the Limberlost."
160. Edmund Clarence Stedman was called the "Banker-Poet."
161. Thomas Wentworth Higginson wrote an "Ode to a Butterfly."
162. Holmes "long walk" spoken of in the "Autocrat" was across

- the famous Boston Common, from Jay to Boylston streets.
163. "Kelmescott House," Chiswick, London, is noted for having been for several years the home of William Morris.
 164. Hogarth Lane, London, was named in honor of the "Matchless Hogarth," who resided there for sixteen years. It is now the site of Hogarth Museum.
 165. At one time "Walpole House" was the home of Horace Walpole, later it became a boys' school, and has since been immortalized in fiction as "Miss Pinkerton's Academy," in Thackeray's "Vanity Fair."
 166. John Keats said:
 "The crown
 Of all my life has been utmost quietude."
 167. S. F. Smith is the author of "America."
 168. Francis Scott Key wrote "The Star-Spangled Banner."
 169. Samuel Johnson said, "Words are the daughters of earth, and deeds are the sons of heaven."
 170. Henry Snyder Harrison wrote "Queed."
 171. James Whitcomb Riley is the author of "A Book of Joyous Children."
 172. Owen Wister is the grandson of the famous actress Frances Anne Kemble (Fanny Kemble).
 173. John Greenleaf Whittier called Samuel Gridley Howe the "Cadmus of the Blind."
 174. Julia Ward Howe wrote "The Battle Hymn of the Republic."
 175. Jack London first won literary recognition through his tales of the Klondyke.
 176. William Hickling Prescott graduated from Harvard College at the age of eighteen years.
 177. Bourke Cochran said, "There is but one straight road to success and that is merit."
 178. William E. Gladstone said of the Constitution of the United States: "As far as I can see, the American Constitution is the most wonderful work ever struck off at one time by the brain and purpose of man."
 179. Elizabeth Barrett Browning's definition of life was:
 "Life means, be sure,

Both heart and head, both active and complete,
And both in earnest."

180. Owen Meredith wrote "Lucile."
181. Oliver Wendell Holmes said "I always believed in life rather than books."
182. Longfellow has been termed "America's best-loved poet."
183. William Wordsworth was called the "Poet of Nature."
184. Lord Byron owned a famous dog named "Boatswain." The poet himself directed the building of a tomb for this animal, which was more magnificent than that which marks the last resting-place of his owner.
185. At Avonmouth we find the Norton Bury of "John Halifax," and the old inn where Dinah Mulock lived while writing this popular tale.
186. The named characters in literature are found as follows:
"Maggie Tulliver" in Eliot's "The Mill on the Floss."
"Lizzie Hexam" in Dickens' "Our Mutual Friend."
"Wackford Squeers" in Dickens' "Nicholas Nickleby."
"Mary Ashburton" in Longfellow's "Hyperion." "Little Annie" in Hawthorne's "Little Annie's Ramble." "Little Nell" in Dickens' "Old Curiosity Shop." "Elsie Venner" in Holmes' "Elsie Venner." "Freckles" in Gene Stratton Porter's "Freckles." "Rebecca" in Kate Douglas Wiggin's "Rebecca of Sunny Brook Farm."
187. Tabard Inn was the starting place of Chaucer's Canterbury Pilgrims.
188. Skelton Castle was the home of Stevenson, author of "Crazy Tales"; here Sterne visited him, and wrote his famous letters from "Crazy Castle."
189. Sir Walter Scott was called "The Wizard of the North."
190. Hogg was called "The Ettrick Shepherd."
191. Daniel Webster in his Eulogy on Adams and Jefferson said,
"If we cherish the virtues and the principles of our fathers,
Heaven will assist us to carry on the work of human liberty
and human happiness."
192. Edward Everett's Oration on Washington is spoken of as "the most eloquent oration in the English language."

193. Charles Sumner was caned in the United States Senate chamber by Preston A. Brooks.
194. Bronson Alcott and his daughter, Louisa M. Alcott, were each born on November 29.
195. Edward Bellamy was the founder of the "Nationalists Clubs" in the U. S.
196. Anne Dudley Bradstreet was termed "The Tenth Muse."
197. Hezekiah Butterworth wrote "Zig-Zag Journeys."
198. Mary Abigail Dodge was known as "Gail Hamilton."
199. Edward Eggleston wrote "The Hoosier Schoolmaster."
200. Will Carleton wrote "Over the Hills to the Poor House."

BOOK MENTION

The Spiritual Message of Literature. A Manual of Comparative Literature, with Topical Outlines, and Lists of Useful Books for School, College, and Private Study. By Kenneth Sylvan Guthrie, A.M., Harvard, Ph.D., Tulane; M.D., Med. Chi., Phila. Comparative Literature Press, Brooklyn, 182 Monroe Street.

Character Development. A Practical Graded School Course. By Charles Keen Taylor. Published by The John C. Winston Co., Philadelphia. Price \$1.00 net. Postage 10 cents.

The Old Testament Phrase Book. Similes and Metaphors, Phrases and Short Descriptive Passages. Classified in a Sequence for Convenient Study and Reference. By Louise Emery Tucker, M.A. Sturgis & Walton Company. Price \$1.00 net.

Readings from The Old Testament. Selections from the English Bible. For Reading in Home and School and for Supplementary Work in the Class Room in Reading and English. Arranged and Edited by Louise Emery Tucker, M.A. Sturgis & Walton, New York. Price \$1.25 net.

Creed and Curriculum. By William Charles O'Donnell, Jr. A discussion of the question, Can the Essentials of Religious Faith and Practice be Taught in the Public Schools of the United States? 119 pages. Price 75 cents net. Eaton & Mains, N. Y., Publishers.

PAMPHLETS

Wisconsin Memorial Day Annual, 1914. Compiled by O. S. Rice, State Library Clerk. Issued by C. P. Cary, State Superintendent, Madison, Wisconsin.

Lock-Step Schooling and a Remedy. The Fundamental Evils and Handicaps of Class Instruction; and a Report of Progress in the Construction of an Individual System. Friend Wm. Richardson, Superintendent of State Printing, Sacramento, Cal.

List of Books for Reading and Study in the Educational Foundations Normal Course

Note—The books starred are required, the other optional

History and Principles of Education

*Monroe—Brief Course in the History of Education.....	\$1.25
Painter—History of Education.....	1.20
Quick's—Educational Reformers.....	1.50
Spencer—Education	.38
Harris—Psychological Foundations.....	1.50
*Horne—Philosophy of Education.....	1.50
Butler—The Meaning of Education.....	1.00
*Bagley—The Educative Process.....	1.25
Colvin—The Learning Process.....	1.25
James—Psychology (Briefer Course).....	1.60
*James—Talks to Teachers.....	1.50
*Dewey—The School and Society.....	1.00
DeGarmo—Herbart and the Herbartians.....	1.00
Report of the Committee of Ten.....	.30
Report of the Committee of Fifteen.....	.30
Dexter and Garlich—Psychology in the Schoolroom.....	1.50
Yocum—Education, Culture and Democracy.....	1.25
Ruediger—Principles of Education.....	3.00
*Bolton—Principles of Education.....	3.00
Davidson—History of Education.....	1.00
Chancellor—A Theory of Motives, Ideals and Values, in Education	1.75

Methods of Teaching.

*Taylor—Principles and Methods of Teaching Reading.....	.90
*Taylor—Composition in the Elementary School.....	.90
*McMurry—The Method of the Recitation.....	.90
*Walsh—Methods in Arithmetic.....	1.25
McMurry—Special Method in Arithmetic.....	.70
*Strayer—The Teaching Process.....	1.25
Meumann—The Psychology of Learning.....	2.00
Seeley—New School Management.....	1.25
Hinsdale—The Art of Study.....	1.00
Hamilton—The Recitation.....	1.25

Imagination

Beautiful, even radiant beyond the power of language to picture them, troops of icebergs come swinging over sunlit seas from their far Northern home. Sometimes imposing, like silvered cathedrals, and sometimes grotesque in form like fantastic images, they sparkle in the icy waters as gems dropped from the skies. But they have no souls for music, no eyes for love, no soil for roses and no trees wherein birds may build their nests and welcome the dayspring with their song.

So is intellect without imagination.

* * * * *

The Science of Ornithology contains no record of a one-winged bird. Flight requires equilibrium. Intellect without imagination can not reach life's highest altitudes. Education must deal with imagination.

* * * * *

Tycho Brahe, astronomer, donned court dress when he entered his observatory to study the heavens. Thus he acknowledged the kingship of the Creator, whose flaming worlds betokened His glory. Imagination lifted him to the companionship of the Infinite. Even by so much was he greater than his science.

* * * * *

A Kentucky lad, veins full of Irish blood, determined to become an orator. Discouraged by parents and friends, he betook himself daily to the barn to practice the art of speaking, imagining the wondering cattle to be a throng of eager listeners. So Patrick Henry found a career.

* * * * *

The teacher, gifted with imagination, looks into the roguish brown eyes of the troublesome boy, sees the soul lurking in their depths, and realizes that there is something more important than discipline for the sake of a mark on a monthly report card. Such a teacher looks not only *down* at the little fellow before him but also *up* at the man he is to be. Imagination masters subjects not in the curriculum and grasps details not set forth in the book of rules.

New Subscriptions and Renewals received this month entitle the sender to a copy of Dr. W. E. Chancellor's latest book, "SILAS WRIGHT" fully postpaid.

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EDUCATIONAL FOUNDATIONS

31-33 E. 27th St., New York City

Educational Foundations

VOL. XXV.

APRIL, 1914

No. 8

Dr. Henry Snyder

DR. HENRY SNYDER, whose picture adorns our first cover this month, has been for many years Superintendent of Schools in Jersey City, New Jersey. His election to the Presidency of the Department of Superintendence was a well-deserved honor. We hope to have a biographical sketch of Dr. Snyder in our next issue.

Webster Versus Woolley

By Gilbert Cosulich

THE DEFENDANT herein, author of the justly popular *Handbook of Composition*, has in his preface filed a demurrer to the charge of dogmatism. He has endeavored to justify himself on the grounds of simplicity and discipline. While these defences may hold good with regard to rules of syntax, they can scarcely have much weight in questions involving the status of particular words and phrases. Labeling authorized expressions "Bad" or "Incorrect" would seem to fall somewhat short of scholarship. Here dogmatism leaves the realm of simplicity and discipline, and approaches dangerously near to that of narrowness, not to say positive inaccuracy.

In many cases Dr. Woolley is not to be blamed for unqualifiedly condemning words or locutions that are with equal lack of qualification sanctioned by the latest Webster's. Usage changed in the

time elapsing between the International edition—in force when the *Handbook* was being prepared—and the New International, which appeared in 1910. We also find, however, that many words declared spurious by the learned text-writer were recognized as lawful currency by Webster's Dictionary not only in its recent edition, but in that of 1894—thirteen years before the *Handbook* was published.

Apart from the question of justification, this discrepancy gives rise to a practical problem for teachers of English. Both books are fixtures in the average classroom. Students are bound to notice the disagreement, and ask questions. Can these questions be candidly answered without causing a lessening of the students' confidence in this valuable text-book? Is not all this more confusing and less disciplinary than a more tolerant attitude on the part of the text-writer would have been—an attitude that would have led him to give his young readers the benefit of different views and tendencies, instead of telling them but half the truth?

Revision of some sort, then, would seem necessary. Shall it be undergone by the *Handbook*, or shall the mountain go to Mohammed?

The following list contains uses and pronunciations recognized by Webster's New International Dictionary,* but disallowed, expressly or impliedly, by the *Handbook of Composition*. There can scarcely be complaint if we adopt as the test of authorization that laid down by the *Handbook* itself:

"In consulting the dictionary for the standing of a word, one ought to observe, not merely whether the word is in the dictionary, but whether, being there, it is marked Obsolete, Slang, Low, Vulgar, Local, or Colloquial. If it is so marked, it is either bad English or English not in good literary standing" (page three).

But even this test has been applied liberally; for there have been omitted from the list words that, though not explicitly marked as above, are given by Webster's with some reservation. Such are *climax* (acme: "popularly"); *hung* (executed: "*hanged* is preferable"); *notorious* (other than in a sinister sense: less "usually"); and *toadstool* (poisonous mushroom: "(esp.) in popular usage"). It might be added that *down* may be a verb, though not in the sense

Dr. Woolley probably had in mind when he fixed his canon against such use.

āl mond	electrocution	pār'iah, pa ri'ah
al'ternate	endorse (approve) *	partake of (eat)
ăp ricot	equine (noun)	peek
baseballist	excur sion (zhun)	per cent (noun)
beg to state *	fal con	Persia, Persian (zha,
brŭsque	fīrstly	zhan)
buoy (bōō'i)	friendly (adverb)	piano-forte (fōrt)
cablegram	gāpe *	poignant (poin yant)
chă'ri vā'ri	help but	propose (intend) # *
clerk (verb)	if (whether) *	raise (noun)
conclude (deter-	individual (indiscrim-	rig (vehicle)
mine) *	inately used for	search (in— <i>for</i>)
cour tesan (cōr)	person) *	smoker (smoking
cowardly (adverb) *	juglar	car)
cute (piquant, engag-	line (of business) *	so (= so that)
ing)	military (noun) *	sundown *
des ignate (dez)	misconstrué	try (noun) *
disha bīlls	musicianly	up-to-date (adjec-
electrocute	oblig'atory	tive)

* Those marked with an asterisk are authorized also by Webster's International (1894).

Webster's makes a fine distinction between this word and *purpose*, but expressly uses the idea of *intention* in defining the former.

School Gardening

By Van Evrie Kilpatrick

President School Gardening Association of America

WHAT CAN be done by school children in large city schools to bring great numbers of them into touch with nature is a great problem. One of the most fruitful and successful ways of accomplishing this task in an elementary manner is to encourage home-grown plants. These home-grown plants may be employed in the autumn by using bulbs which will bloom at the end of the first term, or about January 30th. Another much simpler and more serviceable way is to have the children plant seeds in flower pots during the spring term. How can this be done?

Method Developed and Employed at Public School 52, Manhattan.

About the first of March, every child is asked to bring to his class room a four or five-inch empty flower pot. As these flower pots are collected, they are piled in a corner of the class room, care being taken to see that each pot has the name of the owner.

When each child has a flower pot, some day for a nature study lesson, a teacher takes her class out in the garden and instructs them carefully in the filling of their flower pots. They are told to place some coarse material in the bottom, as broken clay, or even small stones or gravel. Sometimes a small sod is placed in the bottom. Then the pot is filled with dark loam to within one-half inch of the top. Care should be taken to keep the earth loose pressed lightly only on the top.

The children then take their pots to the class room. While each pot is on the desk before its owner, the teacher explains and shows how the planting should be done. Then she distributes the proper number of flower seeds to each child. Usually each class room selects a single flower. The most hardy and sure varieties

of flowers are the nasturtium, candytuft, zenia and cosmos. When the seeds have been placed according to their size—about one half inch to one-eighth deep, the soil is pressed down firmly.

Each child then takes his little pot home and watches for the upcoming plant. He is told how to care for it; that is, it should be watered but once a day in such a way that there should be little or no drainage. He is told that when the plant drains, it is being drowned. It should be kept moist. The amount of water which a plant needs depends entirely upon its environment. A plant sitting in a sunny window or near a stove will absorb much more moisture than one in a north window.

After a period of ten days the teacher inquires how many children have noted that their seeds are up. Any child whose seeds have not come up by that time is asked to bring the flower pot to school and have it replanted.

It is very important to note at this stage that it is not profitable to give children seeds for the reason that it is very difficult to know whether they are used for the purpose given.

At the end of the term in June, an exhibit is held and each child in school is expected to exhibit his plant, together with his other work, on his desk. A prize system of awarding honors to the best individual exhibit, and to the best class exhibit serves to bring out all the forces of emulation.

It is well to add that there are many difficulties which will arise in carrying out this plan, but the overcoming of these drawbacks, especially by each individual child, affords the highest kind of educative material. It is just the struggle to overcome and control the forces of nature that makes this work so highly educative. It naturally appeals to the child, and to his parents. His school plant soon becomes his pet and constant care, and if he be made responsible he is taught the great lessons of responsibility.

Some Suggestions for Schools in More Trying Environment.

Many schools in New York City are not so fortunate as Public School 52, Manhattan, in the matter of soil. In fact, it is a real task to get any soil at all in the proximity of many schools. Near many schools, however, there is somewhere a vacant lot where the

children may be asked to fill their flower pots. Even though the earth be poor and full of clay, it can be made to support some plant life.

If the soil is clay soil, a little sand can be put in it, or lime, and possibly some bone fertilizer; and this will support most of the hardier annuals.

If the soil be sandy, some humus material should be added, and florists will tell you where you can secure the best sheep manure and other well-known fertilizers. Two or three pounds of this will do for an entire class. Remember that nasturtiums are the surest to give results, especially in sandy soil.

If, as occurs in many schools, there be no place at all available for earth, it seems to be that the larger boys and girls in a school could make a trip to the country and bring in baskets of earth which would do for small potted plants.

It is also possible that in some sections the children could be induced to pay ten or fifteen cents for a pot and the earth at a florists, but I believe that in nine-tenths of the schools of the city the work could be conducted, either by the teacher taking her class to a place where there was earth, or by the teacher requesting the pots to be brought to the school room filled with earth.

Classes which are trying to make the best exhibit might be encouraged to plant two or three flower pots each, and by selecting the one having the best growth, the exhibit could be made very excellent in this way and, at the same time, the experience and education would be increased. The many schools which have tried this plan have found it very attractive and it is recommended to all schools because it was so simple and easily worked out.

Simple Correlations.

The life history of each plant would be the subject of an interesting composition. Each child would feel an interest in its work, and it could easily be made a work of considerable extent and value. The plant at any stage of its growth, together with the plot, would make an attractive object for drawing and the child who draws it would have an unusual interest in it.

Manual Training.

For the exhibit, each child should have a basket for his plant, and this he should be taught to make in school. When this basket is made and decorated, it would become a most excellent piece of work to train in implied art.

56 Ways to Spell "Isosceles"

IT IS REPORTED that high school students in New York State, who have tried the Regents' examination in geometry misspelled the word "isosceles" fifty-six different ways. It was said at the examination division of the State Education Department that pupils sufficiently advanced to study geometry are supposed to have passed approved courses in spelling. The possibility of spelling a word in so many ways presents a mathematical as well as an orthographical problem. Perhaps some of our readers will try to figure it out.

Home Gardening Directed by the School

(U. S. Bureau of Education)

A Plan for the Better Economic and Educative Use of the Time of Children in Cities, Towns, and Manufacturing Villages

IN THE cities, towns, manufacturing villages, and suburban communities of the United States there are approximately 13,000,000 children between the ages of six and twenty. Of these about 9,750,000 are enrolled in the public and private schools. The average daily attendance is 6,500,000, two-thirds of the enrollment and one-half of the school population. These children are taught by 300,000 teachers at a cost for all purpose of \$300,000,000. The average length of school term in the cities is 180 days. The average attendance is 120 days. The length of the school day is about five hours.

Probably five per cent of these children are away from home during the summer vacation months with their parents at summer resorts or visiting in the country. Between five and ten per cent are employed in some useful, healthful, productive occupation. Eighty-five per cent remain at home without any useful, healthful occupation requiring any large part of their time. Most of them have little opportunity for play. Some of them work a portion of the time at occupations at which they earn very little and which are not suited for children at their age. The dangers of idleness and unsuitable occupation are very great for all. A large majority of them belong to families whose members must earn their living by their daily labor and for which the earnings are so meager that anything which can be added by the children is much needed. Many of them are cold in winter, and must go hungry much of the time. More of them live in small, crowded rooms and in poorly furnished homes. More than two-thirds of them leave school at fourteen years of age or earlier, to become breadwinners. Because

of lack of proper contact with nature and the experience which comes from suitable, purposeful, productive occupations, most of them do not get from their years in school such education as they should.

In this situation is involved an important problem of education and economics which can, it is believed, be solved in no other way so well as by home gardening done by children under the direction of the schools. In all of the manufacturing villages, suburban communities, smaller towns, and outskirts of the larger towns and cities there is much valuable land in back yards, vacant lots, and elsewhere which might be used for this purpose. In every school in a community of this kind there should be at least one teacher who knows gardening both theoretically and practically. This teacher who should, of course, be employed twelve months in the year, should teach the elementary sciences in the schools during school hours and should, out of school hours, direct the home gardening of the children between the ages of seven and fifteen. If possible the teacher should have the assistance of an expert gardener, so that the work may be done in the most practical and profitable way. The teacher and the gardener should help the children find the plots of ground near their homes best suited for garden work, aid them by some coöperative method to have the lots properly plowed and prepared for cultivation, help them select seeds, and show them how to plant, cultivate, and harvest, so as to obtain the best results. The teacher should spend the afternoons and Saturdays of winter, spring, and fall, when school is in session, and all of the vacation days of summer, visiting the children in their homes, directing their work, and giving to each child such help as it most needs. Once a week or oftener, during vacation months, the teacher should assemble the children in groups for discussions of their work and of the principles and methods involved.

Vegetables, berries, and fruit grown should be used first as food for the children and their families; then the surplus should be marketed to the best advantage. Through the help of the teacher this can be done in a coöperative way. Ten or fifteen cents worth of vegetables each day from the gardens of each of 200 children would amount to twenty or thirty dollars. In the summer and

fall, when the surplus is large and can not be marketed to advantage, the teacher should direct and help the children in canning and preserving for winter use or for sale. The canning and tomato clubs of the southern states have already shown what can be done in this way.

It is difficult to estimate the results of this plan when it shall be in full operation throughout the country. For the children it will mean health, strength, joy in work, habits of industry, an understanding of the value of money, as measured in terms of labor, and such knowledge of the phenomena and forces of nature as must be had for an understanding of most of their school lessons. They will also learn something at least of the fundamental principle of morality; that each individual must make his or her own living; must, by some kind of labor of head, hand, or heart, contribute to the common wealth as much as he takes from it; must pay for what he gets in some kind of coin.

The economic and sociological results should also be considered. Many experiments already made show that with proper direction an average child of the ages contemplated can produce on an eighth of an acre of land from fifty to one hundred dollars worth of vegetables. A third of the children in the city schools of the United States might easily produce \$200,000,000 dollars a year.

This plan in full operation would probably do more toward keeping your children out of the factories and mills than all of the child-labor laws on the statute books. A boy, ten or twelve years of age, with a quarter of an acre of land, working under careful direction, can produce more for the support of the family than could be purchased with the child's wages from the mill. Children should not be ground in the mills nor sweated in the factories; their strength should not be sapped and their nerves racked by working in the heat and dust of indoors, yet all children should learn to work; it is good for them and they joy in it.

This plan will also do much to solve the problem of the idle negro. A large part of the negroes of the southern states live on the outskirts of cities and small towns. Their cabin homes are frequently on large lots and surrounded with vacant lots covered with weeds and rubbish. During the vacation months the negro children roam idly on the streets, falling into mischief and vice.

Under proper direction they might make, on these back yards and vacant lots, enough to support themselves and more. Their parents might then put into savings banks a good part of their earnings. With the money thus accumulated they could buy or build their own homes and gain some degree of that independence necessary for good citizenship for men and women of any race. The negro children would be kept from vice and would gain habits of industry. Incidentally these negro quarters would be changed from places of ugliness to places of beauty.

Probably the most valuable result of this plan will be found in the fact that it will make it easy for most children to attend school three or four years longer than they now do, a thing more and more desirable, since education for life and citizenship in our industrial, civic, and social democracy can not be obtained before the age of adolescence. In some way all children must have instruction and training after the years of childhood, or state and society must suffer for the failure. If a child can contribute to its support while in school, it may remain in school much longer than if it must be carried as a dead weight until it quits school to go to work.

The fact that this work will produce a generation of men and women who will find their recreation after the close of their eight-hour labor day in profitable home gardening is also not the least important reason for its introduction.

Compared with the results, the cost will be inconsiderable. No addition to the number of teachers will be required. It will only be necessary to require different preparation for one teacher in each school. Fifty thousand such teachers will be sufficient for all the city, town, and manufacturing village schools in the United States. To add \$500 to the salary of one teacher in each school, in order to retain his services throughout the entire twelve months, would require an additional expenditure of \$25,000,000, only one-twelfth of the present total cost of these schools and less than one-eighth of the total value of what may easily be produced by the healthful, joyous, educative labor of children who now spend much more than half of their waking hours in idleness hurtful to them physically, mentally, and morally.

In the estimates submitted to Congress by the Commissioner of Education for the support of the Bureau in the next fiscal year

an item of \$5,700 is included to enable the Bureau to begin the introduction of this kind of work in the schools of the United States. The commissioner believes that it will only be necessary to work out details of plans and to present them to school officers, together with full information in regard to results of somewhat similar work already done at various places. It will, of course, be necessary also to induce colleges and training schools for teachers to so modify their courses as to give to some teachers the preparation required for this work. Many such teachers should be prepared in the colleges and schools of agriculture.

New York University German Travel Study Tour

MANY ASCRIBE Germany's commercial and industrial prestige to her system of education. American teachers who wish to study the German schools at first hand will welcome the Travel Study Tour which New York University has organized for this summer. The University party will leave New York, July 2d, and visit every important educational center in Germany, inspecting the schools under the supervision of experts. Fifty German educators representing every important field of education are co-operating with the University. University credit is given where the required reading is completed and a satisfactory thesis submitted.

Literary Creation

Suggestion, Beauty and Embellishment

By Henry Albert Phillips

Author of *The Plot of the Short Story*, *Art in Story Narration* and
formerly Associate Editor of *The Metropolitan Magazine*

IN the discussion of suggestion we probe the very heart of all literary endeavor.

No matter how prolific may be the idea that leads to the vision of the writer, or how grand the vision itself, or how letter-perfect the technique employed in expression, unless the literary product contains well-defined elements of suggestive matter which forms a bond of sympathetic understanding with the reader, it can lay no claim to Art.

In a word the writer must bring his story-message "home" to the reader.

This does not necessarily mean that there must be some allusion to an actual incident of the reader's every-day experience, but rather to an episode within his ken, a familiar groove in his emotions, an assembly-call to the sentinels of his imagination, an appeal to reminiscence, or to dreams of the future. The story is but a mirror-covered door into which the reader, either peers and sees the very image of his most dear or most dreaded self, or steps inside and bears company to one of his choice moods in a delicious super-experience.

An illuminating synonym for suggestion is the word, re-creation. It is the artist again at his delightful task of rousing the dormant potentialities within us to mental and emotional participation. As all knowledge is more or less dependent on a recognition of relationships, so the powers within us bear fruit only when relative suggestion is brought to sun upon them.

The substance then of all suggestion is the effective employment of familiar associations and well-known relationships.

Suggestion in the short story must be eminently potential; every word, every phrase, every paragraph must be developed to the utmost power in the imagination and emotions of the reader. The bond of sympathetic association brings each incident within the circle of the reader's personal concern. The burden of proof, throughout, however, lies with the writer; the reader can promise nothing but acquiescence and a modicum of patience.

There are various ways in which suggestion should operate and various means employed in producing it.

Richard Harding Davis had arrived at a sinister portion of his story when he described Tangier as "lying below him like a great cemetery of white marble"; and Hawthorne forecasts the tragedy of his hero when he introduces him: "His face wore the melancholy expression, almost despondency, of one who travels a wild and bleak road, at nightfall and alone * * *

Convincing suggestion is never isolated and brazen, for then it would neither contain Art nor preserve illusion. Its entrance into the narrative is subtle, unassuming and unostentatious. It is a piece of the short story itself, and not a glaring patch in the fabric. Here and there we find a word artfully employed that suggests a word of color and feeling; now it is a phrase that reveals an unguessed trait of character; or again we find a strong character that suggests a poignant strain of reminiscence; or a bewitching atmosphere that awakens a delightful mood; or a description that recreates a picture we have seen in our dreams. And the glory of this induced reality lies in its quality of a supernal experience. The world owes much happiness indeed to the literary craft.

Suggestion, then, as we have just shown, is not necessarily implied through figures of speech. The writer may concentrate his entire artfulness in making the story, as a whole, suggestive of a particular phase in life.

The suggestion to try to perform some Christian service during Christmastide is so strongly impressed on one, after reading "The Christmas Carol," that it is nothing short of an impulse; the suggestion of human brotherhood is so powerful, upon reading "The Outcasts of Poker Flat," that an aristocrat, or a Levite, might be impelled to clasp the hand of a pariah.

The function of figurative language is to make us see the object we know slightly through its artful juxtaposition with the object we know well. This arrangement alone can make the picture live. And it must not include merely all we can see through an excitement of the optic nerve, for then the longer we look the less we see. Even the visual pictures suggested, must in turn suggest the grander vision beyond, which has its seat in the emotions and in the imagination.

Verbal photographs occupy much the same place in literary art as camera photographs do in pictorial art. If it is merely a transcription of an actual scene, without being in any way enhanced or changed by the operator or writer, then the scene must contain intrinsic artistic merits to which the portrayer can lay no particular claim. But, if a catalog or inventory is all that is needed, there are those who can do this work better than artists. Photographs are noted for their sharp lines and cold details; works of art are famous for their vivid reality and flaming poignancy.

Versimilitude and not verity is the aim of the fiction writer. The former is but another name for fiction; the latter an interchangeable word for fact.

There is a marked similarity between short-story narration and poetical composition, in that they both compress and suggest a universe within their limits. The differentiation is that short-story suggestion is extensive, while that of poetry is intensive and melodic.

Only the poet in his narrative dares make his statement as intensive as Poe describes the love of Annabel Lee:

"With a love that the winged seraphs of heaven
Coveted her me."

Almost the same sentiment is described in prose by the same author, in "Ligeia": That she loved me I should not have doubted; and I might have been easily aware that, in a bosom such as hers, love would have reigned no ordinary passion."

In the short story, therefore, both selection and suggestion play the vital parts. Selection seeks out the natural fitness of material, which suggestion employs its task of visualizing the spiritual and forming a definite impression in the reader's mind. In order, how-

ever, to perfect, through suggestion, those outward and visible signs of the inward and spiritual struggle, the writer must himself, through sympathy, come to share the instincts and universal heart secrets of mankind.

Beauty in fiction is dependent on an innate sensitiveness of conception and a masterful yet delicate execution.

The esthetic quality of fiction must be integral: intrinsic, structural and effectual. While the beauty may be capable of analysis; yet no one portion may be said to constitute it wholly. The standard of beauty is perfection itself, and a work of artistic fiction is measured by its approximation of this requisite. The writer's vision, motif and technique, and the effect upon the reader must each contribute its esthetic quota.

There are those who may presume to quarrel with this inclusive definition of fiction's requirements of beauty. They will probably refer to many of the greatest stories written by acknowledged masters of fiction and point out that the phases of life chosen by them for depiction were not essentially beautiful. Whereupon we must arrive at the conclusion that the artist and the writer are privileged to choose from whatsoever they please in all the range of human frailty and experience. We find that the most powerful stories filling our volumes of every age are colored by crime and battle, sorrow and suffering, derangement and death.

The following representative group of acknowledged artistic stories illustrate the matter of choice in story material: "The Substitute," by Coppee; "The Necklace," by de Maupassant; "Markheim," by Stevenson; "The Man Who Was," by Kipling.

The test comes in the artist's presentment. We have but to examine his vision, his motif, his technique and the effect left in our hearts and minds. In other words, we look upon his chosen subject as he sees and treats it, and not as it stands by itself, or as we choose to consider it. Wheresoever our writer revels in licentiousness, condones crime, sneers at sorrow or desecrates death, he is far from being an artist.

Again we find the world owing the artist a great debt. It takes the ugliest fatalities of life and reveals the shining beauties that lie concealed within their sombre depths. With the ancient poet he exclaims, "Oh, Death, where is thy sting? Oh, Grave,

where is thy victory?" Through the glory of his vision a hero is made to shine above the carnage of battle; virtue is made to purify the stain of crime; sympathy is roused to soften sorrow; a healing calm grows out of derangement and suffering; an angel of promise rises beside the figure of grief and death.

Furthermore, an antithesis is strangely induced through the artist's realistic revealment of the more unpleasant sides of life. The moment the reader is released from the immediate thrall of the artist and his portrayal of pain, grief, bereavement, misadventure, peril, or what not, he is filled with a pleasing sense of his own security, and a divorcement and isolation from the imagined conditions. Yet in that very moment, he may be wiping away tears over the tragedy, shuddering at the spectacle, or shrinking from its brutality. It shows the difference between reality and realism; the former effects the senses first, passing thence to the imaginations and emotions; the latter directly attacks the emotions through the imagination and then assaults the senses. All of which dispels the fallacy of "the tired business man" who shuns all forms of artistic entertainment and seeks amusement that does not demand mental or emotional participation. Artistic entertainment alone contains the elements of recreation, and it is only recreation that he needs to dispel physical fatigue and mental worry. The lower form of amusement is oftentimes below the par of his intelligence and acts merely as a stimulant, and, like all stimulants, exacts a penalty in reaction.

Thus we never should be in doubt of the beauty of the true artist's vision, no matter what the theme of the story. He must be endowed, however, with a natural taste for the esthetic and equipped with a talent for embellishment. There are isolated exceptions with the flaw in all human fabric, which proves the rule.

Thus we find de Maupassant frequently offending good taste with his licentiousness; Poe sacrificing beauty to an over-indulgence in horror; O. Henry marring rhetorical and technical perfection by his indifferent and colloquial English.

Embellishment is the moral exercise of the imagination in giving fitting expression to pictorial thought. It is but a tool and talent to be used cunningly, economically and honestly by the

creative hand. It must savor the plainest commodity of thought to the gusto of the most refined imagination and emotions.

In embellishing the unvarnished truth, we cater not only to the esthetic appetite, but also strengthen the limited reserve force of one's average powers of attention. For instance, we can watch the soldiers in uniform, and equipped with the suggestive trappings of war, march past by the hour; whereas, parading civilians become tedious to the mind in a short while. One is entertainment; the other is mental effort without emotional recompense.

In the practice of embellishment, repression again becomes the writer's only safeguard. It is seldom that prose can bear the full luxuriance of poetic treatment. For in every word and syllable and accent of poetry we expect rhythmic beauty; the fabric of verse is saturated with it; that alone can sustain its exalted utterance.

"Apollo's upward fire
Made every eastern cloud a silvery pyre
Of brightness so unsullied, that therein
A melancholy spirit well might win
Oblivion * * * "
Shows the lush imagery of Keats.

In fiction, however, such imagery would cloy some of the other vital requisites with which beauty must share in its expression. The movement of poetry is too conducive to deliberateness; its maze of imagery forbids rapid perusal; its very lavishness is suggestive of unmeasured leisure. But in fiction we find more of the Spartan than the Sybarite qualities. We have seen that practically no subject-matter is tabooed in fiction and that always beauty is perfected through deeds. There must be dispatch, dramatic force, action. Words must be dynamic as well as esthetic; treatment must be dramatic as well as imaginative; the effect should be awakening and exciting rather than somnolent and soothing.

When all is said and done the vision is the thing. That vision which the artist sees must be passed on to the reader by means of not unlovely symbols and must be acclaimed by him beautiful. The essential point is that good fiction re-creates within the reader's breast beautiful emotions, noble desires, elevating thoughts, enthralling aspirations that not infrequently lead to better living and ideal deeds.

A Review of Representative Genetic Studies of Number

By Henry B. Howell, Principal P. S. 27, Jersey City, N. J.

IV. Prodigies

PRODIGIES, or lightning calculators, as they are popularly called, have seemed to most people who have given them only casual consideration, to be in a class by themselves, inexplicable freaks who perform in a manner inconsistent and unconformable with ordinary mental laws. However, while those who have studied them find them precocious indeed, yet with a precocity that is not freakish, but, on the contrary, entirely natural. I have elected to discuss them under the head of genetic studies, because, while their performances could well be treated from the standpoint of pure psychology or of the objective efficiency, considerations from which standpoints must enter in at any rate, yet they are chiefly important for pedagogy, so far as they are important at all in the present state of our knowledge of them, on account of the light they incidentally throw on the development of the number sense. The prodigies are essentially children or primitive men in their numerical operations.

It is related that some of them spent their early days as prodigies in arranging and piling up pebbles, thus trying to symbolize the steps in the series idea which for them was highly abstracted in a manner similar to that of savages and children. That same struggle for expression eventuates in other instances, as we have seen, in number forms, thus furnishing another example of analogy in this particular to childhood and, may we say, also to the childhood of the race.

The biographies of most of them reveal that so far as they are mental calculators of the unartificial type, they know nothing of books or the learning of the schools. They develop short cuts that are marvelous in their effects, but these short cuts are unsophisticated,

naïve, uninfluenced by education in the ordinary sense. In short, their power seems to be the result of an unusual native capacity to discover concepts of the relations of numbers unknown to most. This capacity together with a tenacious memory for numbers gives them their precocity. Now if we could know in a measure how they came about these concepts or even what they are, new light would undoubtedly be thrown on one aspect of the development of the number concept. Perhaps, as Dr. Hall intimates, much number power inherent in the race has been strangled and become atrophied through ill-advised artificial methods and disuse of natural ones which have passed out like the "lost chord." It is a matter of common experience that the knowledge of a few short cuts even with ordinary mortals increases calculating power amazingly. Prodigies provide a largely unexplored field. If there are any that are in captivity or that can be caught, let the pedagogues get at them.

The chief studies on this subject are by Scripture¹ and Mitchell.² Mitchell's is the more careful and thorough-going. He himself is a minor prodigy and through a study of his own case has been able to penetrate the secret of much of the wonderful work of others. "Natural" calculators develop *spontaneously*, at least in the first instance; artificial calculators use external aids from the start. A calculator may begin in the natural way and later use artificial methods as Gauss (see biographical sketch) did in his use of logarithms. George P. Bidder, Jr., whose natural gift is doubtful, was greatly dependent upon artificial aids. Our interest is in the born calculators, cases of mathematical precocity, not of deliberately practical operations.

Let us get into touch with some of the prodigies through the biographical interest. The following sketches are taken in the main from Mitchell (where they are not the fact is noted):

Tom Fuller was born in Africa in 1710, and was brought to Virginia as a slave at the age of fourteen. He never received any schooling and was wholly illiterate. His principal feats in mental calculation were the reduction of a number of years, months, days, etc., to

(1) E. W. Scripture. *Arithmetic Prodigies*. Amer. Jour. Psychol. iv, 1891, 1-59.

(2) F. D. Mitchell. *Mathematical Prodigies*. Amer. Jour. Psychol. xviii, 1907, 61-143.

seconds, finding the sum of geometrical progression, and multiplying as many as nine figures by nine figures. He was extremely slow, his longer calculations requiring weeks; his method seems to have been exclusively a counting method, more or less abbreviated by practice. There is no evidence that he ever learned what school boys know as the multiplication table; this ignorance, strange as it may seem, would not necessarily militate at all against his expertness as a calculator, nor does it furnish any explanation of his lack of speed, since, as we shall see, one may become even a "lightning" calculator without knowing this table.

Jedidiah Buxton was born in Derbyshire, England, in 1702. His father and grandfather were men of some education, but he himself had none. Moreover, he was very stupid from childhood, not even showing any mathematical ability. Not until the age of twelve did he show interest in calculation. Once his well of genius was tapped, however, he developed into a major prodigy, and became able to handle immense numbers, once (at least) squaring a 39-figure number, and making other surprising calculations. He was very slow (it took him over two months to perform the feat named above) and never got much beyond the counting stage. He could calculate while working and carry on two different calculations at once. The fact that he had practically no interests outside of calculation is an illustration of the extreme isolation in which the calculating ability may develop. The possessors often make no practical application of their facility, but exploit it merely for exhibition and money-making purposes. To become proficient, however, the prodigies must have found an inherent interest in calculation for its own sake and to find audiences must have found many persons similarly interested. This inherent interest in figures and processes, as such, which has been observed also in children, has its pedagogical application in this; that teachers probably agonize too much over the concretion of number work for children, much of their work in this direction being "love's labor lost" (compare Dr. G. S. Hall Ed. Problems, Vol. II, page 365).

To stimulate interest in this review, it may be well before going further with our brief biographies, to give an example of Buxton's method of procedure, to show how differently from ordinary persons (including teachers) the calculator operates. To multiply

456 by 378, he multiplied successively by 5, 20 and 3 to get 300 times 456; then multiplied 465 by 5 and that product by 15, and added the result to 300×456 ; and finally completed the operation by adding 3×456 . It will be noted that, although some writers who have discussed prodigies (Scripture, Proctor) have thought that an enlarged multiplication table (beyond 12×12 , say, up to 100×100) was needed for the larger calculations, there is no item with a single exception in the foregoing calculation requiring a table beyond 12×12 , or, indeed, any table at all. If he used a table at all, he would need a slightly extended one to multiply by 15. But in all probability he simply *counted* in the series of multiples of the multiplicand, in each of the several operations involved. Mitchell, a minor prodigy himself, who through his knowledge of his own methods and his training in psychology, has gained an insight into the methods of others greater than that of any one else who has discussed the subject, has shown in his own case how this may be done. For example, to multiply 48 by 64 he would count by 48's to 384 ($= 8 \times 48$), then by 384's to 1536, then 3072 ($= 8 \times 384 = 64 \times 48$) the required answer.

Zerah Colburn, son of a farmer of little education, was born in Vermont in 1804. He began to calculate when five years old. His power developed gradually and gradually deteriorated through lack of practice. His education was fairly good but was subject to interruptions. He had only a moderate liking for mathematics, preferring the languages. His feats were the ordinary arithmetical operations, multiplication by five figures, extracting square and cube roots (of perfect powers) and factoring large numbers. In extracting roots and factoring he used the method of two-figure endings which is a method more or less common with the prodigies. I quote a description of it from Mitchell: "Given the last two figures of a number, the last two figures of the square are known; but given only the last two figures of a perfect square, the last two figures of the square root are not definitely known, although the possible values are usually only four in number. Similarly, an odd ending has only one possible cube root, but an even ending has either none, or two which differ from each other by 50. Now, suppose a given number is known or suspected to be a perfect square or cube and its root contains only three figures. The first figure

can readily be determined by inspection and the last two figures must be one of a limited number of possible roots of the ending of a given number. It is usually easy after a little practice to tell almost at a glance which of the possible roots to choose in a given case. In doubtful cases, (multiples of 5, *e. g.*, where the number of possible roots is greater), such expedients as casting out 9's, squaring or cubing one of the suspected answers or some number near it, or using the three-figure instead of the two-figure ending, will help to decide which is the correct root." It is in this class of problems that Mitchell thinks he might compete with the real prodigies, but "skill in solving such problems does not imply special skill or quickness in other branches of mental arithmetic. * * * This is a method of guessing by inspection of the ending of the given number, not a real calculation." In short, it is one of the tricks of the trade and is cited here, for one reason, to show the necessity, in striving to gain some understanding of the feats of foreigners, for distinguishing between such a method and genuine calculations. The application of this method to factoring is still simpler and seems to give some promise of usefulness in the school room; it is, therefore, given below. (In order to make the scheme more workable by the ordinary person Mitchell's account is slightly modified and the wording somewhat changed; also, for the sake of clearness, an example has been worked out.)

Appendix III

If the number to be factored is not already odd and prime to 3 and 5, it may be made so by division in order to limit the possible number of two-figure endings in the number to be factored. Take the case of an odd number prime to 5. If the last two figures of one of its divisors are known and the division is exact, the last two figures of the other can have only one value; a table may be constructed, if desired, showing the different pairs of endings in the factors which will produce a given ending in the product.

The procedure would be as follows: Having rendered the number to be factored prime to 3 or 5, if not so already, observe the two-figure ending; consult the table (the table in appendix shows the kind of table indicated, though the actual table would be

more exhaustive of two-figure endings) for the two-figure endings of each of an initial pair of factors; assume that a certain number with one of these endings is a factor; carry a division far enough to decide whether the last two figures of the other factor can result, and as soon as this is seen to be impossible, abandon the work; try again.

For example, factor the number 487305.

$$487305 \div 5 = 97461$$

Since the two-figure ending is 61, the two-figure endings of the initial factors are 73 and 57 (table appendix).

Try 373 as one factor; it is known that the factor will end in 57.

$$\begin{array}{r} 373 \overline{) 97461} \quad | 26 \\ \underline{746} \\ 2286 \end{array}$$

Abandoned, because 6 appears in the quotient instead of 5.

Try 273:

$$\begin{array}{r} 273 \overline{) 97461} \quad | 357 \\ \underline{819} \\ 1556 \\ \underline{1365} \\ 1911 \\ \underline{1911} \\ 0 \end{array}$$

Initial factors are 273 and 357.

$$273 = 3 \times 91$$

$$357 = 7 \times 51$$

The factors of $487305 = 5 \times 3 \times 7 \times 51 \times 91$.

It is thus possible to save much work, especially where the numbers involved are not very large; a factor may often be rejected almost at a glance which would otherwise have to be divided through to the end.

Henri Mondeux, born in Tours, France, 1826, was the son of a wood cutter. Tended sheep at the age of seven and learned calculation, by the use of pebbles. Later, like several of the other prodigies, he became a professional calculator. Unlike many of them, he was able to profit by instruction in mathematics and showed considerable aptitude up to a certain point. His knowledge of mathematics enabled him to formulate many ingenious processes and to deal with algebraic problems as well as arithmetical operations. But he belonged to the natural family of great calculators, his methods in the first instance taking shape independently of books.

Jacques Inaudi, born 1867 in Italy, came of a most-talented family and early, like Mondeux, became a tender of sheep. While thus occupied at the age of six he began calculating; at seven he could multiply five figures by five figures mentally. His education was very limited and he did not learn to read and write until he was twenty. His customary feats were subtractions with 21-figure numbers, addition of five 6-figure numbers; multiplication of 4-figure numbers by four figures; division of two 4-figure numbers; simple algebraic problems by trial. In Binet's tests on Inaudi, 2-figure multiplications were performed in two seconds, 3-figure in 6.4 seconds, 4-figure, the limit of his ordinary stage exhibitions in 21 seconds, 5-figure multiplications in 40 seconds, but 6-figure multiplications required 240 seconds; showing that in passing from five to six figures he exceeded the limits of his ordinary practice and became confused.

Ugo Zaneboni, a compatriot of Inaudi and born in the same year, had only a fair education. He began calculating at the age of twelve, his power being well developed at fourteen. His facts were based on railway and similar statistics, evolution with the aid of 2-figure endings, also roots of imperfect powers probably by trial and memory. It is possible that he made use of a simple number form. The use of a number form by prodigies has been previously referred to in the article on Number Forms and the reason for it briefly discussed. How the number form can aid the calculator will appear to some extent in our notice of Mlle. Uranie Diamandi, whose case has been set forth at some length by Dr. Mlle. I. Ioteyko in *La Revue Psychologique*, III, 1910. It will be possible also to

picture the number form of George P. Bidder, Jr., since it has been preserved in the collection of Galton.

Johann Martin Zacharias Dase, born in 1824, Hamburg, was in a class by himself as a calculator; there seems to have been scarcely any limit to his powers. He attended school at the age of two and one-half years, took to the stage as a professional at fifteen, but while he was probably precocious (*i. e.*, began at an early age), in calculation, he was slightly stupid in everything else, even including mathematics. He had a wonderful figure memory and more than usual power of apprehending the number of objects in a group. He, upon occasion, multiplied mentally 100 figures by 100 figures in less than nine hours, extracted the square root of a 100-figure number in less than an hour; he required 54 seconds for 8-figure multiplications, 40 minutes (41 figures per minute) for 40-figure multiplications, and in his 100-figure multiplications maintained a speed of 20 figures per minute. Dase never displayed any confusion in his work and it seems that only physical fatigue and not the size of the numbers could limit the extent of his calculations. What tricks (devices for saving calculation) he introduced into his work does not appear. Doubtless he made good use in this connection of his remarkable figure memory. He may have, as Mitchell says, memorized the squares and cubes of all numbers up to 100. This would, with the aid of the method of endings, enable him to obtain "instantly" three or four-figure roots (of perfect powers) and to approximate the roots of imperfect powers, and so relieve some of the tedium of computation, but, of course, is inadequate by itself to explain such monumental feats as his. They must have been, in the main, genuinely labored calculations.

We have proceeded far enough, perhaps, to appreciate Mitchell's statement of the three grades of mathematical ability in the calculators.

The lowest grade never get beyond the stage of pure counting, the practice abbreviates this. At this stage the point of view is not even arithmetical; the calculator thinks not of operations, but of properties of numbers and of series and the short cuts he uses are of a relatively simple sort, showing no mathematical insight. (Fuller, Buxton, Inaudi, Zaneboni.) The second grade have a well-developed knowledge of arithmetic and an arithmetical point

of view. It is operations of calculation not mere properties in which they are interested and the various short cuts used are we may suppose suggested by practice rather than by mathematical keenness. In this class may be placed Dase, also Colburn.

The highest grade have real mathematical ability, power to take the algebraic point of view, to generalize and hence to discover all sorts of ingenious short cuts and symmetries. (Mondeux, Bidder, Sr., Diamandi, Safford, Gauss.)

Mitchell does not expect this classification to be taken too seriously; there are no hard and fast lines, but it serves to bring out the point that mental calculation and mathematical ability are essentially independent.

How One Community is Widening the Use of Its School Plant

[As a concrete illustration of the wider use of the school plant the following outline of activities is taken from an address by Mr. C. L. Riley at the opening of the People's Forum, Plainfield, N. J.] :

THIS EVENING we are opening a series of meetings at which questions of social and political importance will be presented and discussed. Everyone who cares to attend is welcome and no limits will be set to the discussion save the limits of courtesy and equal opportunity.

On behalf of the Recreation Committee I would say that this People's Forum is but one step (though an important one) in the enlargement of the use of the public property by the people of our community. Starting from a few evening classes the work of this committee has gradually expanded until now it includes a long list of activities, all of which are carried on in the school buildings after regular school hours.

The Board of Education has been quick to recognize the value of this work and has flung open the doors of one school after another as the need arose.

In the few minutes at my disposal I will mention the main activities so far developed.

On Monday evening in the Washington school a dramatic club meets with an average attendance of about thirty members.

On Tuesday at Franklin school the Washington Dramatic Club meets. Attendance about twenty-five.

On Wednesday evening at Washington school there is folk dancing by a class of about twenty-five.

On every other Thursday afternoon a group of eighth-grade colored children meet for games and amusement.

These children's clubs are called "Guilds of Play."

On Thursday evenings at the Washington school the Junior orchestra practices (23 pieces).

On Friday afternoon at the Stillman school two "Guilds of Play," groups of eighth-grade children, meet on alternate weeks.

On Friday evening at Washington school the "Dunbar Club" (colored), meets for a program of games and other amusements. Attendance about 100.

On Saturday evening at the Washington school the "Washington Social Club" holds its weekly dance with an attendance of about two hundred and twenty-five.

The Committee began active work less than one year ago and since last May, when a record was begun, 12,186 people have attended the activities mentioned. At the present rate the attendance will amount to fully 20,000 people in the first year. The cost is therefore about five cents per person per meeting.

When it is realized that an efficient supervisor is hired and the expenses of all these groups paid by the expenditure of only five hundred dollars by the city council and five hundred dollars by Board of Education, it is clear that the people themselves want these things and are willing to help pay for them. There is no field of public education where a little money goes so far as in this work.

Book Mention

Peter and Polly in Summer. By Rose Lucia, Principal of the Primary School, Montpelier, Vermont. American Book Company.

The pretty ways and sweet thoughts of childhood are presented in this beautiful little book in a most fascinating manner. The illustrations are singularly appropriate and are of a high order artistically. The rich and innocent humor of child life appears constantly in text and picture and in reading these pages we feel that we are close to life as it is—not as it is sometimes imagined by high-browed authors. As we follow the experiences of Peter and Polly we are well entertained and instructed and we come to think of them as our really-truly friends. The children who are fortunate enough to have reading lessons in this book will learn much of the out-of-doors in summer time.

Personal Hygiene. 240 pages. Price 40 cents. **General Hygiene.** 382 pages. Price 60 cents. By Frank Overton, A.M., M.D. American Book Company.

These books emphasize hygiene in every chapter, and at the same time give enough facts of physiology and anatomy for the understanding of the hygiene of every part of the body. They show how to prevent diseases, and teach the pupil how to keep well and strong. They teach practical hygiene, in clear, concise language, to a greater extent than any other grammar grade books. **Personal Hygiene**, for the lower grades, comprises a simple treatment of disease germs; the importance of cleanliness, of good air and deep breathing, of exercise, and of proper food and drink; and the care of wounds and accidents. **General Hygiene**, for the upper grammar grades, treats these subjects from a more advanced point of view. It lays stress also on public sanitation, and gives more detailed information regarding anatomy, physiology, the organs and cells, and the chemical composition of the body. Throughout

the series, alcohol and tobacco are discussed sanely, simply and comprehensively.

Each book contains questions, glossary and index. These add greatly to the value of the series for school and general reference work. The publishers are conferring a favor upon the schools in publishing such excellent books at such low prices.

Play and Recreation for the Open Country. By Henry S. Curtis. 8vo, cloth, xvi+265 pages, profusely illustrated, \$1.25. Ginn and Company.

The greatest problem of our rural communities is how to make country life attractive enough so that farm people will find it satisfying and be content to remain on the farm.

This book is an attempt to show some ways in which the adventure and romance and social coöperation which the country had in the days of the pioneer, but which it has so largely lost, can be brought back to country life. It contains many helpful suggestions for the organization of recreation in the rural home, in the rural school, and in the rural community. It is intended for parents, teachers, and other students of rural life.

The author has brought to this work a unique preparation, as he has been at different times a general director of playgrounds in New York City, supervisor of playgrounds for the District of Columbia, and founder and first secretary of the Playground Association of America. More recently he has been engaged in organizing the movement in many cities and has given courses at universities, normal schools, agricultural colleges, and teachers' institutes. Both by early training and by later study he is thoroughly familiar with the problems of the rural community.

Literary Snap-Shots

By Mary Eleanor Kramer

MRS. ROBERT LOUIS STEVENSON died at her home near Santa Barbara, California, on February 18th. She met Stevenson on the continent in 1876, and four years later they were married in California. Thus until Stevenson's death in 1894 she was his devoted comrade, nurse, and literary collaborator.

* * * * *

Says C. J. Manning in Collier's Weekly: "That jaded creature, Time, has taken in hand the editing of the yells of Boyland and there has resulted a new term of scorn, "You-Jen-Ick."

"Muggins" and "Muggsy," "Skinny" and "Fat," with their motley crew of freckled, bow-legged, knock-kneed, and cowlicked companions, in the old days found war cries in the fascinating tales of piracy on the high seas, or gleaned pet names in the home nursery. From the nursery came that best-loved title of infamy, "cry-baby." What scorn dwelt in its application to some weaker member of the pirate band! What storms of hot tears that title teased from the lad who drew it at pirate gatherings! Instead of the "cry-baby" taunt a new challenge rings on the air in the vicinity of schoolhouses.

"Last on the school grounds is a you-jen-ick baby"! labors the lungs of a "Skinny," and the pell-mell of legs to avoid the title speaks the utter scorn in which the eugenic baby is held.

* * * * *

Miss Mary E. Waller, author of "The Wood-Carver of 'Lympus,'" etc., is at work at her home on the Island of Nantucket on a book of impressions and observations which will bear the title "From An Island Outpost."

Bouck White, author of "The Call of the Carpenter," writes of practical salvation for the rural community in "The Mixing," a story which has for its sub-title "What the Hillport Neighbors Did." The Village of Hillport had two dominant elements as far apart in aims as the poles—the town summer colony and the actual village folk. The commuters held themselves aloof from village life and the villagers kept to themselves. The Reverend Mr. Dagner comes to Hillport and tries to awaken the spirit of progress. He fails until the wise Mrs. Corbin gives him her practical co-operation. Gradually Hillport is made over; the streets are cleaned; morals are cleaned; civic improvements wipe out the plague spots and white paint transforms the ugly cottages into things of beauty, a farm products company is organized; in fact, Utopia arrives and calls herself—Hillport. Yet everything Mr. White places before the reader is sane and practical. Every Hillport could go and do likewise. Everyone who is interested in public welfare should read the book.—(The Mixing, by Bouck White. Doubleday Page & Co.)

* * * * *

"Notes of a Son and Brother," by Henry James, a continuation of the account begun in "A Small Boy and Others" of the life he and his brother William led as boys in Switzerland and Geneva, Newport and Cambridge, is one of the new books announced for the spring. There they knew such men as John La Farge, Hunt, Professor Norton, Professor Childs and Ralph Waldo Emerson, who was a particularly close friend of Henry James, Sr. The volume will be illustrated with drawings made by William James when he was studying to become a painter.

* * * * *

My Wife's Hidden Life: The reader who selects this book because of the possibilities in its title, will find no idle gossip's tale, but one of deep pathos. Just how one may live beside another, never understanding, is the pitiful story within the covers of this book. The man who tells the story was the son of a bank manager in a London suburb. He was half in love with a vulgar but vigorous young woman who had refused him because she wasn't sure

of his income, when he met a governess from a girl's school in Brussels. She attracted him instantly and the attraction being mutual, their marriage quickly followed. The wife proved herself a woman of refinement, taste and endurance. The husband does not realize the wife's inner life until it is too late. A diary which she has kept reveals it all to him. One lays down the book reverently, and with pity for those who must know the agony of never being able to undo a wrong that has been done though the heart may yearn and break through long weary years.—(My Wife's Hidden Life. Anonymus. Rand, McNally & Co.)

* * * * *

Forest Neighbors: Far up in Northern Michigan there is a little solitary lake with the charming name of The Glimmerglass. More than forty years ago it was discovered by a wandering lumberman, who bought it and brought his family to live there. And to the boy who grew up in those woodland solitudes the most interesting friends were the forest neighbors who prowled about the shores of the Glimmerglass.

"Forest Neighbors" is a collection of six charming stories of wild animals who frequent that little sheet of water. The beaver, the trout, the lynx, the porcupine, the loon, the deer—these are the heroes. The book is by the late William Davenport Hulbert of Seattle, who died last year. It was first published in 1902, and is now reissued with all the original illustrations, at the modest price of fifty cents. All lovers of genuine animal lore will welcome "Forest Neighbors."—(Forest Neighbors, by William Davenport Hurlbert. Doubleday Page & Co.)

* * * * *

The Farm Life Readers: Everywhere it is being urged that agriculture be taught in the public schools, but everywhere the teacher proclaims that the course of study is already overcrowded. The new Farm Life Readers solve the problem to a marked degree. When pupils are reading from these books they are also studying agriculture in a simple and attractive form. The contents is most attractively arranged under sub-titles, which at once awaken

interest. Who would not love to read of *Plant Secrets*; *More Plant Secrets*; *Bird Neighbors*; *A Few Posies*; *The Green Wood Tree*; *Boy Scouts*; *Camp-Fire Girls*; *Luther Burbank*, etc. The publishers are to be congratulated on the happy manner in which they have solved a vexing question.—(*The Farm Life Readers*, by Lawton B. Evans, Luther N. Duncan and George W. Duncan. Silver, Burdette & Co.)

* * * * *

Sunshine Jane: Shortly before her death in February, 1913, Anne Warner French, the author of the inimitable "*Susan Clegg*" stories and "*The Rejuvenation of Aunt Mary*," wrote an optimistic story, "*Sunshine Jane*," which reflects in a large measure Anne Warner's own wholesome philosophy of life. Jane is a sunshine nurse whose mission it is to bring sunshine into every life she touches. She practices her unique profession in a country village with astonishing results.

The tragic events which surrounded the close of Mrs. French's life throw the optimism of "*Sunshine Jane*" into strong relief. Her husband and son died within two months of each other at St. Paul, while she was nursing her father, who was ill in England. Four months later, she died suddenly of cerebral hemorrhage, and before her mother and brother could reach England, her father, too, had been buried. "*Sunshine Jane*," however, shows no hint of depression or sadness.—(*Sunshine Jane*, by Anne Warner. Little, Brown & Co.)

* * * * *

The Valley of the Moon: This is the best of the many good things given us by Jack London—what more need be said. It is the story of a young man and a maid who love in a clean, honest natural fashion, and who plan and save, and make up their mind to share comparative poverty together. It is a story of every-day life, with its intermingled sunshine and shadow, and the couple, finally in the far-famed "*Valley of the Moon*" find the long-sought Arcadia.—(*The Valley of the Moon*, by Jack London. The Macmillan Co.)

* * * * *

Blossoms from a Japanese Garden: This is an altogether charming little book, with much foreign spirit in the verse, and with very native delicate illustrations done by Japanese artists. The author is to be congratulated on the admirable manner in which she has combined custom with child spirit. No teacher's library will be complete without this dainty little volume.—(Blossoms from a Japanese Garden, by Mary Fenollosa. Frederick A. Stokes Co.)

* * * * *

Says Collier's Weekly regarding Eugenics: "The 'expert' is always willing to take the human race in hand and do it good—after his own plan, of course. This quality has been peculiarly in evidence of late because of various betterment congress sessions. We have heard much of various schemes of getting a 'thoroughbred' race. Now, idealism is a great social force, and moral earnestness is not to be despised, but it should be remembered that the existing human race is the product of some three hundred thousand years of drastic elimination. This process of survival is still going on and will go on. The notion that the best human beings can be 'bred' is an exploded fallacy. What a man is and does depends much more on his own independent choice than on his pedigree. What humanity needs now is the detailed application of proved facts concerning food, air, work, and sleep. Our burden is to get people to do what is already known to be right, and not to provide them with cross-indexed ancestors."

* * * * *

A new honor for Professor John Bach McMaster was conferred in his election, on February 7th, to the presidency of the Franklin Inn Club, of Philadelphia, in succession to the late Dr. S. Weir Mitchell. Of this club of authors, artists, and publishers, Dr. Mitchell had been president for fourteen years. Its membership-roll has included such famous Philadelphians as Horace Howard Furness, the Shakesperian scholar; Dr. Henry Charles Lea, the historian; Mr. Owen Wister, the novelist; Prof. Schelling, the authority on Elizabethan poetry; Prof. Cheney, whose history of the Elizabethan period has just been published; Prof. Larned, who

has elucidated the German influence in America; Dr. Keen, the celebrated surgeon, who as a young man was associated with Dr. Mitchell in the Civil War hospitals of Philadelphia; Dr. Gummere, of Haverford College; Ex-Provost Harrison and Provost Smith, of the University of Pennsylvania; Mr. John Luther Long, the novelist; Mr. Francis Rawle, chairman of the committee of the American Bar Association; Major-General James Harrison Wilson, the most distinguished surviving corps commander of the Union armies; and Mr. F. Hopkinson Smith, artist and writer. The Franklin Inn Club is to be congratulated upon the maintenance of the long-established traditions ensured by Dr. McMaster's election to the presidency.—The Dial.

Interesting Magazine Topics for the Month of March

The Atlantic—The Monroe Doctrine and Latin America, F. Garcia Calderon; The Education of the Girl, Mary Leal Harkness; War and the Interests of Labor, Alvin S. Johnson; The Wasted Years, Fanny Hardy Eckstrom; Out From My Kindred, Abraham Mitrie Rihbany.

The American Review of Reviews—Uncle Sam Fighting the Disease of the World, William Atherton Du Puy; Colonel Gorgas, Panama, and the World's Sanitation, John B. Huber, A.M., M.D.; Military Camps for College Students, Arthur Wallace Dunn; The "Wireless" Girdling of the Earth, J. F. Springer; Our Recent Immigrants as Farmers, Lajos Steiner.

Scribner's Magazine—Breaking Into the Movies, Richard Harding Davis; Sardis and the American Excavation, Howard Crosby Butler; My First Years as a Frenchwoman, III, Mary King Wadlington; A Washington's Birthday Reminiscence.

Everybody's Magazine—New Jobs for New Women, Virginia Roderick; Socialism: Promise or Menace? Hillquit and Ryan, D.D.; Better Business, William Hurd; Here Are the Poets, N. P. Dawson. (A Row of Books.)

Hearst's Magazine—The New Thought, Elbert Hubbard; My

Life's Story, David Belasco; Marshall: Vice-President, John Temple Graves; Municipal Ownership in Successful Operation; Charging With Sheridan Up Missionary Ridge, Brig.-Gen. M. V. Sheridan.

The Cosmopolitan—Putz: Pictorial Pantheist, Christine Brinton; The Wartime Story of General Pickett, Mrs. Gen. G. E. Pickett; The Fighting Legislator, John Temple Graves; Vivisection and Surgery, Ella Wheeler Wilcox.

The Independent (Feb. 16th issue)—Peace by Arbitration, Andrew Carnegie; Technology's White City; Something New in Agricultural Education.

(Feb. 23d issue)—Dangers of the Present Philippine Situation, Dean C. Worcester; Training the Mothers of Statesmen, Albert Bushnell Hart; Cleaning Up College Politics; Stephen Phillips in His Home, Mrs. Stephen Phillips.

The Century—Origins of the American People, Edward A. Ross; Dublin, Brand Whitlock; Charles Eliot Norton, Walter Littlefield; The Next Step in Prison Reform, Richard Perry; Women and the Vote, George Creel.

Answers to 1000 Pertinent Literary Questions

(Continued)

- 201. Postage were first used in the United States in 1847.
- 202. William Dean Howells was the author of "Venetian Life."
- 203. The famous Sorosis Club of New York was founded in 1864, by Mrs. Constance Runcie.
- 204. Amelie Rives Chandler married a Russian nobleman, the Count Troubetskoy.
- 205. Emily Bronte was the author of the lines:
 "No coward soul is mine,
 No trembler in the world's storm-centered sphere;
 I see heaven's glories shine,
 And faith shines equal, arming me from fear."
- 206. Florence L. Barclay is the author of "Following the Star."
- 207. Augusta Evana Wilson wrote "Old Mobile."
- 208. Maurice Marterlinck is the author of the lines: "Truly wise
 you are not unless your wisdom be constantly changing from
 your childhood on to your death."
- 209. "Paradise Flat" was the Chicago home of "Myrtle Reed," the novelist.
- 210. Margaret Deland was the author of "Old Chester Tales."
- 211. Alice Brown was the author of "Meadow Grass."
- 212. Josephine Daskam Bacon wrote "The Memoirs of a Baby."
- 213. The literary characters mentioned are found as follows: "Priscilla Mullins" in Longfellow's "Courtship of Myles Standish"; "Jo Marsh" in Alcott's "Little Women"; "Bob Cratchit" in Dickens' "A Christmas Carol"; "Bill Sykes" in Dickens' "Oliver Twist"; "Little Billie" in Du Maurier's "Trilby"; "Angel Claire" in Hardy's "Tess."
- 214. Eugene Field said of his first book, "The Tribune Primer,"
 "Like the boy with the measles, I am sorry for it in spots."
- 215. Helen Hunt Jackson wrote under the pen-name of "H. H."

216. Robert Louis Stevenson was called "The Gifted Boy."
217. James Fenimore Cooper wrote "The Spy."
218. Phoebe Cary wrote the famous hymn, "One Sweetly Solemn Thought."
219. Frances E. Willard was the founder of the Woman's Christian Temperance Union.
220. Cynthia Westover Alden was the founder of the "International Sunshine Society."
221. William Cullen Bryant began the translation of the "Iliad" in his seventy-first year and completed both that and the Odyssey in six years.
222. America's greatest humorist was Samuel Clemens, "Mark Twain."
223. Louisa M. Alcott adopted for her life motto the words: "Hope and keep busy."
224. Ouida wrote the "Bimbi Stories."
225. "The Red Horse Inn" is in Sudbury, Mass. It is the scene of Longfellow's famous "Tales of a Wayside Inn."
226. Sir Walter Scott describes an old-time English Christmas in "Marmion."
227. Benjamin Franklin wrote "Poor Richard's Almanac."
228. Robert Burns wrote "Tam O'Shanter."
229. "Elmwood" was the Cambridge, Mass., home of James Russell Lowell.
230. John Greenleaf Whittier wrote the lines:
 "We shape ourselves, the joy or fear,
 Of which the coming life is made,
 And fill our future atmosphere
 With sunshine or with shade."
231. "Columbia, the Gem of the Ocean" was first sung in the Chestnut Street Theater, Philadelphia, Pa., in 1843.
232. Henry C. Work, a Chicago printer, was the author of "Marching Through Georgia."
233. Daniel D. Emmet of Ohio, a member of the "Bryant Minstrels Company," wrote "Dixie," the song was first sung at a performance given by this company.
234. John Howard Payne was the author of "Home, Sweet Home."
235. John Greenleaf Whittier wrote "Brown of Ossawatimie."

236. "Mill Grove Farm," on the banks of the Schuylkill River in Pa., was the home of James Audubon, the naturalist.
237. Hans Christian Anderson said: "My life is a lovely story, happy and full of incident."
238. Washington Irving wrote under the pseudonym "Jonathan Oldstyle."
239. Charles Dudley Warner said: "It was Irving, not Hudson, who truly discovered this (the Hudson) river and gave it to us."
240. Alice Cary wrote "An Order for a Picture."
241. Edward Everett Hale wrote the following lines:
"Be mine some simple service here below,—
To weep with those who weep, their joys to share,
Their pain to solace, or their burdens bear;
Some widow in her agony to meet;
Some exile in his new found home to greet;
To serve some child of Thine, and so serve Thee—
So here am I; to such a work send me."
242. Ralph Waldo Emerson said "Hitch your wagon to a star."
243. Shakespeare said: "Sweet mercy is nobility's true badge."
244. James Whitcomb Riley wrote a series of newspaper articles under the signature of Benj. F. Johnson of Boone.
245. George Du Maurier wrote "Trilby."
246. Peter Finley Dunne writes under the sobriquet of "Mr. Dooley."
247. Ellis Parker Butler wrote "Pigs is Pigs."
248. George Cary Eggleston wrote a series of personal experiences of the Civil War entitled "A Rebel's Recollections."
249. Of Charles Battell Loomis, it has been said: "He saw life as through a glass brightly."
250. Maurice Maeterlinck wrote "The Blue Bird."
251. Lew Wallace wrote "Ben Hur."
252. Meridith Nicholson was the author of "A Hoosier Chronicle."
253. "Lord, send a man like Robbie Burns to Sing the Song o' Steam," this was the prayer of the dour old Scotchman—the engineer, of Rudyard Kipling's "McAndrew's Hymn."
254. William T. Sread wrote "If Christ Came to Chicago."
255. H. C. Bunner rebuked all friends who attempted to talk literary

- "Shop" during the luncheon hour, with the words: "Let this hallowed hour with better thoughts be spent."
256. Thomas Dunn English wrote "Ben-Bolt."
 257. Samuel Merwin was the author of "Calumet K."
 258. The "Clock House" at Marnhull, Eng., was the residence of Anne Warner French at the time of her death in 1913.
 259. "Talbothays" was the farm where "Tess" met "Angel Claire" in Thomas Hardy's great novel, "Tess, of the D'Urbervilles."
 260. Joseph C. Lincoln has immortalized Cape Cod in fiction.
 261. Robert Hichens wrote "The Garden of Allah."
 262. Wilkie Collins wrote "The Moonstone."
 263. Casa Guida, Florence, Italy, was for many years the home of Robert and Elizabeth Barrett Browning, here their only son was born, and here Elizabeth Browning died.
 264. Richard Harding Davis wrote "Soldiers of Fortune."
 265. Abraham Cahan first introduced the Ghetto into literature, in his book "Yekl."
 266. Morris Rosenfeld, known as the "Poet of the Sweatshop" wrote "Songs from the Ghetto."
 267. Mary Antin wrote "The Promised Land."
 268. Melville D. Landon, was known as "Eli Perkins."
 269. Robert J. Burdette was known as "The Hawkeye Man."
 270. Henry W. Shaw was known as "Josh Billings."
 271. Eugene Field wrote "Christmas Treasures."
 272. Edward Noyes Westcott was known as "David Harum."
 273. Rev. Charles Haddon Spurgeon was called "The Beecher of England."
 274. Harriet Beecher Stowe's "Uncle Tom's Cabin" was published in nineteen languages.
 275. Helen Hunt Jackson, wrote the following, an extract from her great poem "Spinning":
"Like a blind spinner in the sun,
I tread my days;
I know that all the threads will run
Appointed ways;
I know each day will bring its task,
And, being blind, no more I ask."
 276. Jean Ingelow, wrote the following extract, in "Songs of Seven":

"Heigho daisies and buttercups!

Mother shall thread them a daisy chain."

277. Robert Ingersoll said "Love is the only bow in life's dark cloud. It is the morning and the evening star."
278. Mazzini said: "Whoever first makes a religion of Democracy, will save the world."
279. Longfellow and Hawthorne were classmates in Bowdoin college.
280. Walt Whitman wrote "O Captain! My Captain!"
281. Joan of Arc was the "Maid of Orleans." Schiller wrote a drama entitled "The Maid of Orleans."
282. French designed and executed the statue of "The Minute Man" at Concord, Mass.
283. James Russell Lowell was the author of the following lines, taken from "The Vision of Sir Launfal":
"Not what we give, but what we share,
For the gift without the giver is bare;
Who gives himself with his alms feeds three,
Himself, his hungering neighbor and me."
284. Rudyard Kipling referred to Queen Victoria as "the little old widow at Windsor."
285. Theodore Parker said: "Each can have what inspiration each will take."
286. Sir Arthur Conan Doyle was knighted because of his defense of the English government in his book, "The Great Boer War."
287. "Terre's Tavern" was the inspiration of Thackeray's famous ballad: "Ballad of Bouillebaisse."
288. "Toynbee Hall" is a Whitechapel settlement house in the London slums.
289. Elizabeth Robbins wrote "My Little Sister."
290. W. M. Thackeray was born in India.
291. Paul Hamilton Hayne wrote the following in memory of Wilkie Collins:
"Yet I believe that kindly Death
Reserved for him a welcoming shade—
It seems so natural for his soul
To meet a mystery unafraid."

292. Eden Phillpots wrote "Widcome Fair."
293. Charles Reade wrote "Peg Woffington."
294. Marion Crawford, Owen Wister, Arthur Train and Reginald Wright Kauffman, edited in direct succession, the school magazine of St. Paul's School, Concord, Mass.
295. Joaquin Miller was the "Poet of the Sierras."
296. Anne Warner French was the creator of "Susan Clegg."
297. Mary Mapes Dodge, in "Hans Brinker or the Silver Skates," wrote a delightful story of life in Holland, yet never visited Holland.
298. Louise Chandler Moulton wrote her first book "This, That or the Other," when but eighteen years of age.
299. Richard Watson Gilder had so great an admiration for Joseph Jefferson, that he declared that he would rather be Jefferson than any other living person.
300. The named literary characters may be found as follows: "Jane Eyre," Bronte's "Jane Eyre"; "Hester Prynne," Hawthorne's "Scarlet Letter"; "Marion Holcombe," Collins' "The Woman in White"; "Rhoda Gale," Reade's "A Woman Hater"; "Katerina Maslova," Tolstoy's "Resurrection."

1000 Pertinent Literary Queries

By Mary Eleanor Kramer

(Continued)

301-400

301. Who wrote "Little Lord Fauntleroy"?
302. Who wrote "The Prisoner of Zenda"?
303. What American poet wrote his first verses under the pen-name of "Pip Pepperpod"?
304. What American novelist lives in the famed "Valley of the Moon," Sonoma County, California?
305. Who wrote "The Man With the Hoe"?
306. What great naturalist as a boy was wont to go down into the cellar of his Wisconsin farm home, that he might be comfortably warm, while reading Shakespeare, Milton, Burns and the Bible?
307. What great stage-manager began his career at sixteen years, by carrying a spear in "Hamlet"?
308. What American poet began his career by teaching school in Southern California, where his schoolroom was a "spreading live oak tree, his seats of logs"?
309. What American novelist began to write striking short stories during his freshman year in the University of California?
310. What American writer was born on Rincon Hill, San Francisco, Calif.?
311. What novelist wrote her first book "The Story of Patsey" to raise money to establish a kindergarten?
312. Where is Poe Cottage?
313. For what is Greensboro, N. C., famed?
314. For what was "Chapter Coffee House" noted?
315. Who wrote "The Hound of the Baskervilles"?
316. For what was "Doone Valley" famed?
317. Who wrote "The Light That Failed"?
318. Where do we hear of "Bleeding Heart Yard"?

319. Who immortalized "The Old Curiosity Shop"?
320. Who was the author of the lines:
The pride of chivalry, the pomp of power
And all that beauty, all that wealth e'er gave,
Await alike the inevitable hour
The path of glory leads but to the grave.
321. Who wrote "Three Men in a Boat"?
322. Who wrote "The Right of Way"?
323. Who wrote "A Window in Thrums"?
324. Where do the following lines appear:
God of our fathers, known of old
Lord of our far flung battle line,
Beneath whose awful hand we hold
Dominion over palm and pine,
Lord God of Hosts, be with us yet,
Lest we forget, lest we forget.
325. Who was the first authentic "Poet Laureate" of England?
326. What English poet held the post of "Poet Laureate" for the longest term?
327. Who resides at "Strand"?
328. For what was "Tinkerdom" noted?
329. Who was called the "Poet of the Natural Man"?
330. Who wrote "Dear Lady Disdain"?
331. Who has immortalized the Blue Grass region of Kentucky in literature?
332. Who wrote "Sapho"?
333. Of what poet was it said: "He died, aged sixty-seven, young in the joy of living—almost juvenile in the earthly contentment he radiated"?
334. Who said: "My work is the embodiment of dreams—to bring before men's eyes the image of the thing my heart is filled with"?
335. Who wrote "The Southerner"?
336. To what writer was tendered "A Bow of Orange Ribbon" dinner?
337. Who wrote "Their Silver Wedding Journey"?
338. Who wrote "Harry Richmond"?
339. Who said:

- 393. Who said: "I find letters from God dropped in the street, and every one is signed by God's name"?
 - 394. What was the "Brook Farm" experiment?
 - 395. What New England writer, with her husband and infant child perished by the sinking of a ship off Fire Island, N. Y.?
 - 396. Who wrote the "Blithedale Romance"?
 - 397. Who wrote "Auld Lang Syne"?
 - 398. Who lived in a little hut on the shores of Walden pond?
 - 399. Of what English poet was it said: "He was something of a Quaker in poetry, and loved the sober drabs and grays of life"?
 - 400. Who wrote "The Bigelow Papers"?
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Lessons in Pedagogy

By Charles H. Davis, B.S.

Principal P. S. No. 25, Borough of Queens, N. Y. C.

THREE REPRESENTATIVE EDUCATORS

- (a) Seventeenth Century—Comenius.
- (b) Eighteenth Century—Rousseau.
- (c) Nineteenth Century—Pestalozzi.

I

Johann Amos Comenius

(1592-1670)

HE WAS by far the greatest educator of the seventeenth century. He had no early education, as he was an orphan. He finally became an educated man, a great teacher and a minister. He was the author of the first illustrated text-book, "Orbis Pictus." Two other important works of Comenius are the *Didactica Magna*, and *Janua Linguarum Reserata* (the Gate of Tongues Unlocked).

To Comenius belongs the honor of first proposing that four-fold organization of a nation's schools which has lasted to our own day. He proposed (1) the mother's school in every house; (2) the national school in every community; (3) the gymnasium in every town; and (4) the university in every province.

This means, translated into our own language and practice: (1) infant schools and kindergartens; (2) school for primary and grammar grades; (3) high schools, academies and other college-preparatory schools; (4) colleges and universities. We thus see how Comenius gave form to our modern system of national instruction.

Comenius sought a psychological basis for principle and precept. In Laurie's account of the *Great Didactic*, the nine principles of

learning surely, the ten principles of learning easily, and the ten principles of learning solidly, each begin with the word "Nature." This use of nature by Comenius shows the appeal to psychology as a basis of educational theory.

Educational Principles of Comenius.

1. If we would teach and learn surely, we must follow the order of nature.

2. Let everything be presented through the senses.

3. Proceed from the easy to the difficult, from the near to the remote, from the general to the special, from the known to the unknown.

4. Make learning pleasant by the choice of suitable material, by not attempting too much, by the use of concrete examples, and by the selection of that which is of utility.

5. Fix firmly by frequent repetition and drills.

6. Let everything that is useless be eliminated from teaching.

7. Learn to do by doing.

8. Each language should be learned separately, have a definite time assigned to it, and all tongues should be learned by the same method.

9. As all knowledge of God is the highest of all knowledge, the Holy Scriptures must be alpha and omega of the Christian schools.

II

Jean Jacques Rousseau

(1712-1778)

Rousseau was born in Geneva, Switzerland, and was from the beginning of a restless disposition. He led a wild life. He believed in morals, but did not live up to his belief. He was not a natural teacher.

The "Emile, or Concerning Education," was perhaps the most influential educational book ever written. This work is not a systematic treatise on education, rather it is a philosophical romance into which he has worked his ideas on education. The work is divided into five parts or books. The first book treats of early infancy. The second book treats of the education of a child of from

six to twelve, and the third of the training of the youth between the ages of twelve and fifteen. Moral education from the fifteenth to the twentieth year is treated of in the fourth book, and the education of woman in the fifth.

His first principle is, "everything is good as it comes from the hands of the author of nature, but everything degenerates in the hands of man. The first education should be physical and begin at birth.

The period of a child's education from the twelfth to the fifteenth years is the period of intellectual development.

Having brought "Emile" to manhood in period at which he is to marry, Rousseau endeavors to create "Sophie," an ideal wife.

He believed education of women should be relative to man, and to please man, and make life agreeable.

While Rousseau's scheme of education is in general condemned, his methods are most excellent.

III

John Henry Pestalozzi

(1746-1827)

Pestalozzi was born in Zurich, Switzerland, January 12, 1746. He died in 1827. At the age of six, he lost his father. When fourteen years of age he was a student in the college at Zurich, where there was a noble band of instructors. "So great was the influence of these professors," says the biographer of Pestalozzi, "on these pupils, that the latter came to despise wealth, luxury, material comfort and care for nothing but the pleasures of the mind and soul, and the unceasing pursuit of justice and truth." At first he intended to enter the ministry. He preached one sermon and gave it up; afterwards studied law. Abandoning this, he became an agriculturist. This experiment occupied ten years and ended in failure.

Compayré proposes five steps in the pedagogical history of Pestalozzi: (1) The Asylum for poor children at Neuhof, 1775-1780; (2) the Orphan Asylum at Stauz, 1798-1799; (3) the Primary Schools at Berthoud, 1799; (4) the Institute at Berthoud, 1801-1804; (5) the Institute at Yverdun, 1805-1825.

After having established many fundamental truths in education and failed in the conducting of schools, he began to write. His

first educational work, "The Evening Hour of a Hermit," was published in 1780, and was composed of short pithy maxims, all relating to the one subject, and as a whole forming a complete statement of his theory of education.

His best known work, which embodied the results of Pestalozzi's teachings, is "How Gertrude Teaches Children." Other works of Pestalozzi were "Christopher and Alice," "Figures to My A. B. C. Book," "Researches into the Course of Nature in the Development of the Human Race," and "Leonard and Gertrude."

Educational Principles of Pestalozzi.

1. The principles of education are to be sought in human nature.
2. This nature is organic, consisting of physical, intellectual, and moral capabilities, ready and struggling to develop themselves.
3. The function of the educator is both negative and positive. He must remove impediments to the learner's development, and he must also stimulate the exercise of his powers.
4. Self-development begins with sensations received through the senses. These sensations lead to perceptions which, registered in the mind as conceptions or ideas, constitute the basis of knowledge.
5. "Spontaneity and self-activity are the necessary conditions under which the mind educates itself, and gains power and independence."
6. Practical aptness depends more on exercise than on knowledge. "Knowing and doing must, however, proceed together. The chief aim of education is the development of the learner's powers."
7. All education must be based on the learner's own observation—on his own personal experience. "This is the true basis of all knowledge. The opposite proceeding leads to empty, hollow, delusive word-knowledge. First the reality, then the symbol; first the thing, then the word."
8. What the learner has gained by his own observations has become an actual possession which he can explain or describe in his own words. His ability to do this is the measure of the accuracy and extent of his knowledge.
9. The learner's growth necessitates advancement from the

near and actual to the remote; hence, from the concrete to the abstract, from particulars to generals, from the known to the unknown.

With this summary of principles by Payne which are gradually permeating and changing modern education, we leave Pestalozzi, the representative educator of the nineteenth century.

Questions for Review and Discussion

Note: Much benefit will be derived by writing the answers to these questions.

I

1. What are the individual and social elements of Greek life of the Homeric period?
2. Describe the character and limitations of the Greek priesthood.
3. State the importance of personal and civil ethics among the Greeks.
4. How does this distinction lead to the understanding of Greek moral ideals?
5. Contrast with the mental ideals.
6. Discuss "We have seen that the Greeks failed to reach a satisfactory solution of the relation of developed personality to the demands of social welfare on the religio-ethical side."
7. What is the real meaning to us of Greek education, socially, intellectually, morally, aesthetically? Criticize each of these developments from the modern standpoint, showing the Greek limitations of view of man; (1) as to man; (2) as to women; (3) as to children.
8. Of Athenian and Spartan education make complete statements, first discussing: (a) identity and difference of aims; (b) the place of the individual in the family; (c) the organization of schools—to the period of citizenship; (d) the content of the institution arranged by years, and (e) criticism of the adaptability of this course to the practical necessities of their life.
9. From your knowledge of any of the Greek myths, illustrate animistic instincts.

10. Relate the event of Marathon to the highest development of old Greek education.

II

1. Contrast the methods of Socrates and Pericles for the regeneration of Greece.

2. "A system like Socrates' philosophy involved a complete reversal of the old view of the relation between man and state and at the same time took the feet from under individualism."

3. Discuss Sophists from four points of view: (a) teachers; (b) philosophers; (c) as natural products of changes; (d) as contributors to exhilaration of such changes.

4. What was the addition of Plato to Socrates as to fuller content of purpose and greater detail of method?

5. (a) What did Aristotle add to Plato? (b) How does it show a profounder knowledge? (c) Illustrate by reference to civics, ethics, logic.

6. Outline Plato's course of study and relate to the course of study of Athens and Aristotle's course of study.

7. Compare Roman with Athenian characteristic as follows: (a) Religious beliefs and their efficiency; (b) ethical standards; (c) ideals.

8. Compare the value of their respective contributions to education.

9. Outline course of study in early Roman and late Roman education.

10. (a) Show the difference between Roman and Greek Christianity; (b) show the reason for victorious outcome of former and relate this to monastic ideals.

III

Comenius

1. What principal of education was applied in his *Orbis Pictus*?

2. What principles of his educational theory class him as a naturalist?

3. What was the character of Comenius's *Didactica Magna*?

4. Which of his works was chiefly in the line of the humanistic schooling?

5. What were the several characteristics of the four grades of schools in Comenius's system?

Rousseau

1. What reaction characterized the movement in educational progress at the beginning of the eighteenth century?

2. In what book is Rousseau's discussion of educational theory and practice contained?

3. Give reasons why his theories are or are not worthy of our acceptance.

4. In what respect is the educational theory or practice of the humanists opposed to that of Rousseau?

5. For what advances are we most indebted to the realists?

Pestalozzi

1. How would you compare Pestalozzi with Comenius in regard to his views of teaching?

2. How with Rousseau in regard to his general theory of education?

3. What constitutes the teacher's duty as viewed by Pestalozzi?

4. What psychological order of knowledge does the summary of his principles set forth?

5. What aim of education determined all his practice and method?

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., of Educational Foundations, published monthly, except July and August, at Cooperstown, New York, required by the Act of August 24, 1912: Editor, William Charles O'Donnell, Jr., 31-33 East Twenty-seventh Street, New York, N. Y.; managing editor, William Charles O'Donnell, Jr., 31-33 East Twenty-seventh Street, New York, N. Y.; business manager, William Charles O'Donnell, Jr., 31-33 East Twenty-seventh Street, New York, N. Y.; publisher, Educational Magazine Publishing Co., Cooperstown, N. Y., and 31-33 East Twenty-seventh street, New York, N. Y. Owners of 1 percent stock, W. C. O'Donnell, 31-33 East Twenty-seventh street; C. S. Hammock.

WILLIAM CHARLES O'DONNELL, JR.

Sworn to and subscribed before me this

21st day of March, 1914.

Geo. De Witt Weeks,

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(My commission expires March 30, 1914.)

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REMITTANCES should be made by Post Office Money Order, Express Money Order or Bank Draft on New York payable to the order of Hammock & Co., Circulation Mgrs., Currency should be sent by registered mail.

DISCONTINUANCES—Subscribers wishing their papers discontinued should send notice promptly on receipt of the last issue paid for as shown on the mailing label.

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Entered as Second-Class Matter at the Post Office at Cooperstown, New York.

PUBLISHED MONTHLY, EXCEPT JULY AND AUGUST.

EDUCATIONAL MAGAZINE PUBLISHING COMPANY

W. C. O'DONNELL, JR.

S. M. VAN BRAKLE

Cooperstown,
New York.

31-33 East Twenty-seventh Street,
New York City.

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Industry

"THEY TOIL, not neither do they spin," was spoken of the crimson lilies that grew in the fields of old Judea. Solomon's royal raiment, fine in texture, exquisite in design, gorgeous in color, equaled not the glory of the five-petaled *anemone coronasia*. The Teacher was a nature lover.

* * * * *

FLOWERS are not folks. The loveliness of the lily is an unconscious possession acquired by an unrecognized process. Men toil and spin, thereby accomplishing desired results, exulting in their skill and strength and rejoicing in the rewards of their industry. A worker with a conscious mission is of an order far superior to that of the flower with unconscious beauty.

* * * * *

"HABITUAL diligence" is the meaning given to the word industry. Lexicographers do not know the origin of the form, but it is practically the same in all modern languages—Spanish, Portuguese, French, Italian, German, Dutch, Danish, Early Modern English. Industry is the health of nations, the pillar of society. The Koran bars the gates of paradise against the lazy.

* * * * *

PADEREWSKI, prince of pianists declares that he was a drudge before he became a genius. Not every drudge can hope to become a genius unless we consider the capacity for incessant effort—a fair token of genius. Industry is the price of achievement. Idleness invites decay. The spirit of conquest is the best form of culture.

* * * * *

IS THE subject o'erladen with platitudes? Commonplaces oft deal with eternal verities. It is still incumbent upon instructors of the young to impress upon them habits of noble endeavor. The coast lines of life are strewn with the bones of those who gathered to wait for their ships to come in.

* * * * *

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Educational Foundations

VOL. XXV.

MAY, 1914

No. 9

The New President of the Department of Superintendence

READERS of Educational Foundations are naturally and necessarily interested in the transactions of the National Educational Association and equally so in the affairs of the Department of Superintendence. This Department took new honor upon itself when at the recent convention in Richmond, Virginia, Henry Snyder, of Jersey City, was elected to the presidency. By this election Dr. Snyder becomes more emphatically a national figure in the realm of educational leadership. Such events are sometimes even more significant than they seem. The preferment bestowed upon the new incumbent of high office argues the general recognition of certain elements of gracious personalty, superior qualities of mind and habits of thought, and an experience through which he has been prepared for large responsibilities and in which he has met the test of capacity and judgment. Dr. Snyder's election certainly means all this. Hosts of friends and other hosts just beyond the circle of acquaintance, who know something of his record are predicting popularity for his administration.

In accordance with our announcement in last month's issue, we append the following outline of Dr. Snyder's uniformly successful and highly honorable career:

Born January 30, 1858; graduated High School, Easton, 1874; graduated Lafayette College, degree of A.B., 1878; awarded classical honor; subsequently received degree of A.M.; elected member of Phi Beta Kappa; had charge of elementary school, Easton, Pa., September, 1878-March, 1879; principal Easton High School, April, 1879-December, 1887; teacher Latin and Greek, High School, Jer-

sey City, April, 1891-March, 1892; superintendent of schools from March, 1892, to date; awarded degree of Sc.D., Lafayette College, 1907; lecturer on school administration, summer session of Columbia University, 1906; president, council of education, New Jersey, 1902; president, New Jersey State Teachers Association, 1906; made special survey of high school situation, Harrisburg, Pa., for the Chamber of Commerce of that city, 1912; member of the State Board of Examiners for teachers' certificates; president of the Department of Superintendence of the National Education Association, 1914.

Another Visitor

IT NOT infrequently happens that we throw wide our doors in welcome to some apostle of learning from another country in order to avail ourselves of the advantage of hearing from his own lips the story of his achievements or the details of his method. Cordiality abounds toward all who come to share with us the treasures of their experience. We have Athenian eagerness to hear the new thing. This is well for us and for the visitors. Our country is still entitled to be called new and our educational organization is still newer. So we seek to learn hoping that we shall eventually come to a knowledge of the truth. What though the message brought to us proves to contain only what we have already thought or known and possibly applied in our own way—the messenger with credentials is never *persona non grata*.

Under the auspices of Wisconsin University and the International Child Welfare League, Mr. F. J. Gould of England has been among us explaining his "new system" for character building in children. Mr. Gould insists that the one great object in education should be the development of character. This first—then all the rest, if possible. He observes that this is not the present order. Hence his mission.

Moral instruction, not religious instruction, is Mr. Gould's theme. He draws a sharp distinction between the two. What the final verdict of the American educator will be on this point is not wise to predict, but there is a sentiment deep and strong in favor of

recognizing the religious basis of moral training even in the public school, yet avoiding the sectarianism so strongly discountenanced by our English schoolmaster.

One of the stories used by Mr. Gould in his demonstrations and his manner of telling it is thus described by a writer in the *New York Times*:

When he followed the children to the platform, the audience saw a tall, slender, white-haired man, with a clear, ruddy, English complexion, warm brown eyes, and a peculiarly likable smile. Not the obtrusive smile which many persons assume with the idea that children are going to be caught by it. It was simply as unstudied a part of the man as the color of his eyes.

He didn't bother with "opening remarks." He began just as if he were actually the regular teacher at work in his own school-room. He did not announce the subject he had in mind. He picked up a crayon, turned to the board, drew an irregular line across the top and said:

"Now, this is ice; a great lot of ice. This," he drew a straight line across, a little below the first, "is where the ocean begins. This," he made a mark, "is a ship. And the Captain's name is—"

He wrote beside the dot which was the ship, "R-o-s-s."

"What was the Captain's name?"

"Ross."

"I'll tell you when this happened," he went on, and wrote "1841" beside the name "Ross."

One feature of the demonstration was the constant appeal to the children which kept them alert and concentrated their attention. It was done with such easy naturalness that they probably never suspected any serious purpose behind it.

Instead of saying, as an ordinary story-teller would: "Away back in 1841 an English captain by the name of Ross," and so on, he began in the way described. He soon erased the name and the date. But when he needed to refer to either he would say:

"Now, when Captain—what was his name?" or, "At the time this happened—when was that?" And the children promptly supplied the information.

All of this seems to be mere detail, but it had its specific value,

because it not only kept their attention alive but it trained their memory.

He went on to tell how Captain Ross landed with his men and set out southward, for this way down in the Antarctic. As the story proceeded the teacher continually developed the children's personal interest by having them supply important facts themselves.

For instance, he said that when Capt. Ross returned he wrote a—"what would you call it, when he told all that had happened?" he asked. One girl suggested "summary." Perhaps he had not intended to use that word, but he accepted it as an appropriate one, and continued to use it. But he did not always do this. If the word suggested did not seem to him the expressive one, he kept on until he did get the right one. He never supplied it himself. In this way he stimulated them to discriminate between words and to choose those that best expressed an idea.

All this was valuable, but more or less beside the real purpose. This purpose became clear, at least to the grown-up audience, as he continued his story. He told how Capt. Ross, in his "summary," wrote a sentence—and then he himself wrote that sentence on the board, but leaving out one word.

"The ice . . . is insurmountable."

It was astonishing how quickly, by leading the children to explain "insurmountable," he got them to supply the missing word "barrier." Then he told them how, years later, another Captain from Russia this time, took his ship to the same place. He had read the Englishman's "summary"; had seen that sentence, the one on the blackboard.

"'Humph!' said the Russian Captain to himself. 'So that's what this Capt. Ross says. He's been there, too. He must know a good deal about it. And he says the ice barrier is unsurmountable. Um-m-m. Well—just the same—I think I'll go and see for myself!'

"You see, that man had the proper kind of——," placing his hand on his left breast.

"Heart!" exclaimed the children.

"Yes. Does anyone know the French word for heart?"

"Coeur," said a little girl.

"Yes. Can you spell it?"

"C-o-u-r."

The audience smiled rather audibly. But Mr. Gould wrote it on the board as the child gave it.

"That spelling suits me very well," he said, "for I should have slipped the 'e' out, even if you hadn't done it for me."

By this time, the audience realized that this was a story of courage; a trait rather universally recognized as one of the moral virtues. Sure enough, from "coeur," without the "e" the children soon made cour-age. And the story came to an end, with flashes of interest in the quick questions and answers, but without any pointing of a moral.

In the following interview we learn more of the character of the man and his methods:

"I have given these demonstrations in Great Britain, India, Paris, and the United States. It is the best way, almost the only way, of really making the method understood.

"Here in America people are very much concerned about results. You are always looking for immediate effect. Perhaps that is legitimate when you are dealing with something as nearly concrete as facts are. Trying to get facts into a child's mind is one thing. Trying to put a spiritual conception there is another.

"Teachers come to me and say: 'This is splendid and we should like to do it. But how can we find time for this extra study?'

"Extra study! The study of what goes to make noble manhood and womanhood is the only study which is not 'extra.' Reading, writing, arithmetic, geography, history—all the rest are extra. The one thing essential is character. It is the thing which every school ought to teach; not casually, spasmodically, without definite preparation or purpose; but regularly and according to a constructive plan.

"But the thing I have struggled hardest to bring about is yet to be achieved. That is the introduction of systematic moral and civil instruction in all schools; especially, of course, the great public school systems.

"I have worked out the method to apply to children in the grade schools from about eight to fourteen years of age. Many kinder-

garten teachers are doing fairly good preparatory work. The only suggestion I would make is that they could give their work more coherence, make it more definite and constructive.

"The period from about ten to fourteen I call 'the calm age.' Before that the child is more easily distracted, more susceptible to surface emotions. After about fourteen the boy and the girl are again pulled hither and thither by emotions. They are self-conscious and unquiet.

"But between ten and fourteen—approximately, of course—there is a curiously calm period when they are more easily molded than at any other time. That is when I like best to work with them. But the teaching should be started even before that.

"Most moral instruction—the kind that is given, without anything but a passing purpose, in the schools—is negative. It consists of prohibitions, threats, punishments. Very useful things these are, sometimes. But they are not moral instruction. I use positive methods almost entirely. I almost never tell of crime and its punishment of vice and its consequences. I don't teach courage by pointing the finger of scorn at a coward. I teach it by making the heart of a boy or of a girl thrill with a wonderful emotion at a story of bravery.

"And, by the way, I make no difference between boys and girls. I have worked with thousands of them together, and I find that they react just the same to the lessons they get."

A Review of Representative Genetic Studies of Number

By Henry B. Howell, Principal P. S. 27, Jersey City, N. J.

V. Prodigies

GORGE PARKER BIDDER was born in Devonshire, England, 1806, son of a mason. One brother had a remarkable memory for Bible texts, another was a good mathematician; a nephew had great mechanical talent; his son was an excellent mathematician and calculator; two granddaughters were above average ability in mental arithmetic. The hereditary strain of talent in the family is notable, and while significant possibly in this particular case is not significant in general for prodigies, since the explanation by heredity lacks a basis in too many cases. Bidder learned to count at the age of six, using pebbles, shot, etc., at first and soon became very proficient in calculation, retaining the power through life and using it in his profession. He became a man of wide interests, well educated, able both mathematically and generally. Besides the ordinary arithmetical operations, he did multiplications up to 12 figures by 12 figures; compound interest examples; roots and factors by the aid of 2-figure endings, etc. His methods were often original, highly ingenious, and rapid. A fact bearing on method appears in connection with Bidder. He fancied at first that he possessed a table up to 100×100 , but found that he was in error. If he had 89 to multiply by 73, he would say instantly 6497, but, in what appeared to be merely an instant of time, according to his own account, he multiplied 80 by 70, 80 by 3, 9 by 70 and 9 by 3, and then added up the products. Note the order of multiplication. It begins at the left instead of the right. Many of the prodigies use this order. Indeed, as Mitchell says, there is no reason except custom why we should not all do this; it is more *natural* and just as convenient. In *mental* calculation it favors combining at each separate stage

and so the partial products may be forgotten and anxiety relieved.

GEORGE P. BIDDER, JR., son of George Parker Bidder, is classed by Mitchell as an "artificial" calculator who was stimulated to his comparatively few feats, performed slowly and with occasional errors, by the example of his father; artificial in distinction from a born or natural calculator who usually begins early before he is "spoiled" by contact with schools and inclines to use a counting rather than a conventional method. The fact, however, that he had a number form affords a presumption, at least, that some of his methods were or had been primitive. It is clear that his main interests lay outside of calculating. He was educated for the bar and practiced law. That he was possessed of considerable ability is shown by his having been seventh wrangler at Cambridge in 1858, at the age of 21.

Among other things he was able to multiply up to 15-figure numbers by 15 figures, by the use of cross multiplication, so-called. As at least one other calculator (P. Diamandi) used this method, which has a curious interest of its own, I have formulated the rule and partially worked out an example:

Rule—To multiply a 5-figure number by a 3-figure number by the method of cross-multiplication: Multiply each figure of the multiplicand in turn beginning at the right by each figure of the multiplier in the following order: by the units figure twice in succession; by the tens figure once; by the units figure; by the tens figure; by the hundreds figure; by the units figure; by the tens figure; by the hundreds figure; by the units figure; by the tens figure; by the hundreds figure; by the tens figure (next in order since the multiplication by the units figure has been completed); by the hundreds figure; by the hundreds figure again (since the multiplication by both units figure and tens figure has been completed). As each simple product is obtained write it or visualize it in its place; add each vertical column of single digits as soon as it is completed and write or visualize the sum; lastly perform the reductions in the total product, or do this as soon as the sums of the vertical columns are severally obtained; write or visualize the figures of the total product in their places.

The conventional form:

$$\begin{array}{r}
 46273 \\
 729 \\
 \hline
 416457 \\
 92546 \\
 323911 \\
 \hline
 33733017
 \end{array}$$

The form
by cross-
multiplication
partially worked
out (to 7 x 7)

$$\begin{array}{rcccccc}
 4 & & 6 & & 2 & & 7 & & 3 \\
 & & & & 7 & & 2 & & 9 \\
 \hline
 & & & & & & 2 & & 7 \\
 & & & & & & 3 & & 5 \\
 & & & & 6 & & 8 & & 6 \\
 & & (1) & & 8 & & (1) & & 4 \\
 & & 1 & & & & & & \\
 & & 4 & & & & & & \\
 5 & & 1 & & & & & & \\
 & & 4 & & & & 4 & & \\
 & & 4 & & & & 1 & & \\
 & & 2 & & & & & & \\
 4 & & 9 & & (1) & & 1 & & \\
 \hline
 & & 12 & & 9 & & (1) & & 1 \\
 & & (1) & & (1) & & & & 7 \\
 & & \hline
 & & (1) & & 3 & & (1) & & 0
 \end{array}$$

The order of multiplications according to the rule for cross-multiplication :

$$\begin{array}{cccc}
 9 \times 3 & 9 \times 6 & 9 \times 4 & 2 \times 4 \\
 9 \times 7 & 2 \times 2 & 2 \times 6 & 7 \times 6 \\
 2 \times 3 & 7 \times 7 & 7 \times 2 & 7 \times 4 \\
 9 \times 2 & & & \\
 2 \times 7 & & & \\
 7 \times 3 & & &
 \end{array}$$

It will be observed that the figures of the partial products are found in vertical lines ; first 7 ; then 5, 6 ; then 4, 4, 1 ; then 6, 5, 1, etc. Each column is added before the numbers that compose the next column are found. The advantage is that the various figures

of the partial products can be forgotten almost as fast as obtained, since that figure of the total product which depends on a given column of the partial product is found and recorded as soon as the column is known and the numbers in that column therefore play no further part in the calculation.

While this method has its advantages, it is obviously a modification of written multiplication, a derivative from the learning of the schools and not a naïve procedure such as that of his father.*

George T. Bidder's, Sr., method of multiplication:

Problem—multiply 397 by 173.

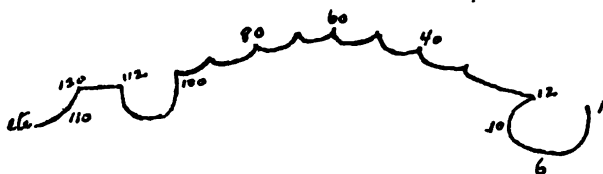
$$\begin{array}{rcl}
 100 \times 397 & = & 39700 \\
 70 \times 300 & = & 21000 = 60700 \\
 70 \times 90 & = & 6300 = 67000 \\
 70 \times 7 & = & 490 = 67490 \\
 3 \times 300 & = & 900 = 68390 \\
 3 \times 90 & = & 270 = 68660 \\
 3 \times 7 & = & 21 = 68681
 \end{array}$$

"The last result in each operation being alone registered by the memory, all the previous results are consecutively obliterated until a total product is obtained."—*Bidder*.

It could only be used by strong visualizers such as Bidder, Jr. and P. Diamandi were; the whole process was doubtless pictured by them and seen as plainly as if written. It is known that Diamandi learned mental arithmetic after written arithmetic, and probably Bidder did the same.

As has been stated, Bidder had a number form which I reproduce here from Galton (Plate 1, Fig. 20, opp. page 380, *Inquiries into Human Faculty*):

* According to Bidder's own account, quoted by Scripture, Bidder, Sr. did not use cross-multiplication, as his son did, but a "natural" method.



That he did not use it, however, at least in his more elaborate calculations appears from his statement to Galton that when he was multiplying together two large numbers his mind was engrossed in the operation and the idea of locality in the series sinks out of prominence.

PERICLES DIAMANDI, born 1868, in Greece, belonged to a family of calculators having a brother and sister who shared his gift. He excelled in mathematics at school and had a more than usual talent for languages. His talent for calculating did not appear until he entered business at the age of 16. He had good memory of the visual type, was possessed of a number form and colored audition for some names. This color imagery also appears in the case of his sister, Uranie, but was of the visual type instead of auditory. Diamandi could multiply mentally up to five figures by five figures, but not rapidly, using the method of cross-multiplication.

URANIE DIAMANDI¹ possesses (at the age of 22) the same aptitudes for mental calculation and the same visual type of memory as her brother with besides a very remarkable power of color visualization. It is from their mother that the two calculators think they get their excellent memory. She has received a classical education and is facile in the languages and history. In mathematics her knowledge does not go beyond elementary arithmetic, but she uses many unconventional processes. At school, at the age of seven, she first noticed that she performed the little calculations proposed more quickly than her fellow pupils. But it was at the age of 13 that the success of her brother stimulated her to cultivate her peculiar talents. At 15, she gave her first exhibition. The operations performed by her in public were additions, subtractions, multiplications,

(1) This account is taken from *Les Calculateurs prodigies*, (I. Ioteyko), pp. 320-328, and *Visualisation colorée et Sens chromatique chez Mlle. Uranie Diamandi* (V. Kipiani), pp. 329-335, *La Revue Psychologique*, III, 1902.

divisions; squaring a number of 4 to 6 figures; extracting the square or cube root of a number of 8 to 10 figures; extracting fourth to eighth roots of numbers of 8 to 12 figures; writing on the board without pause the square of all the numbers from 2 to 100; calculating the number of minutes and seconds elapsed since a given date, *e. g.*, in the year 1453, keeping account of the leap years; indicating the day of the week corresponding to any given date, the day being known to the questioner. Her general memory is excellent, but her special memory for figures is phenomenal. A feat which illustrates this is her grasping and reproducing in two or three minutes as many as 25 figures arranged in a square. The figures seem literally photographed upon her brain and are projected upon an imaginary table lying before her eyes. The image instead of being vague and fugitive as it would be in the case of ordinary persons remains with a remarkable clearness, for a certain time in a conscious condition in all of its original complexity. Once having disappeared, it is susceptible to recall after an astonishingly long time.

In the matter of retentivity, Mlle. Diamandi differs from her brother. She is prodigal of her power, as, perhaps, at her age she can afford to be, and violates the law of economical mental functioning. Her brother says that the figures remain graven in his memory for only two days, but that it would be easy to prolong the time by making a certain effort. His habit, however, in order to avoid fatigue in his frequent seances is not to do this. He has acquired the faculty of forgetting, to the end that he may not uselessly encumber his memory. This is good psychology. The old forms of memory ought to disappear entirely as do the intellectual elements which have served as a basis for them. Forgetfulness, relative amnesia, is to be considered as a condition of psychic renewal. As she grows older Mlle. D. should certainly take account of this law especially in view of the fact that her retentivity will diminish. Mlle. Diamandi's number form is of interest because she has been able to give a good description of it and makes constant use of it in her work. The naive demands which she makes upon it mark her as having some of the characteristics, at least, of the born calculator, in distinction from her brother, who is classed by Mitchell as wholly of the artificial type.

She began to see it at the age of 15, during her first public seance. The form by reason of its constancy and relative fixity appears with the characters of a stereotyped image. It is a square inclosed by figures with a free space in the interior which is the field of operations. Every number proposed appears at once at its place in the chain of numbers. Each operation carries in the central part the mental inscription of the several principal numbers. If it is necessary to make a clear place in view of a new operation, the image of the figures is relegated to the higher portion of the field of operations where it appears to hide itself, but always within the form. Later, after two or three days, the numbers appear to her elsewhere; they are seen in deposit, as it were, in the upper part of her subjective table on the *outside* of the form. The figures to be retained, on the contrary, do not cross the chain, but they are not continuously seen, appearing only at the moment of need. They are for the time being vague, but become definite by an effort of memory. The part outside the chain appears to be a "Magazine" of numbers to be retained longer than the others. The part inside next to the chain will be, on the contrary, affected by the numbers which are not in play at the moment, but which are known as just beyond to be recalled without delay. Finally the numbers actually in play appear in the central part of the field of operations.

The part played by color imagery in Mlle. Diamandi's case is probably unique in the history of prodigies. If she thinks of a number, a letter of the alphabet or the name of a day, the images which she has in her mind appear colored with perfect clearness. In the number form, the several figures of each composite number have their own peculiar colors, always the same, and the number as a whole has its color. The chain of numbers is as a flowery garland projected upon a gray background. A peculiarity of this colored number form is that closing the eyes is fatal to it, nothing remaining except a vague form without figures or colors. With the eyes open, the mental coloration of the figures enters as a cause into their recall and consequently into the faculty of mental calculation. When a figure is forgotten, its recall is facilitated if its color forms a contrast with the neighboring figure (already in mind). For example 104 (black, white, maroon) is easy to ap-

prehend and retain because 0 which is white is found placed between two dark colors; likewise 129 (black, light yellow, brown) is more easily grasped and retained by reason of contrast. It is of psychological interest to know that, while the numbers thought of bring with them the colors, the contrary does not happen. The colored visualization serves to enrich the associations and thus to furnish additional clues in the effort of number recall.

TRUMAN HENRY SAFFORD was born in Vermont in 1836. His father was interested in mathematics and his mother had been a school teacher. He exhibited an all-round precocity; began to calculate between the ages of 3 and 5, studied higher mathematics at 8, computed and published almanacs at 9 and 10. His education was extended and he displayed an interest in all studies, but especially in mathematics and astronomy. He could perform easily and rapidly all of the feats of calculation already described, including the extraction of roots and finding of factors (by the aid of two-figure endings) and the multiplication of one large number by another (in one case, each factor was composed of 18 figures). His memory, of the auditory type, was encyclopedic in scope, not confined to figures. An idiosyncrasy which must have lent interest to his performances was a marked habit of nervous contortion and restless movement during calculations, sometimes amounting to almost a riot of convulsive manifestations, an exhibition doubtless also of psychological interest if one could understand its full significance.

ANDRÉ MARIE AMPÈRE, born 1775, in Lyon, France, was also precocious, beginning calculations with the aid of pebbles, etc., at the age of 3 or 4. Became an all-round scholar and especially distinguished as a physicist. Specific information concerning his work as a calculator is largely lacking.

CARL FRIEDRICH GAUSS, born in Germany in 1777, began calculating in his 3d year and probably retained his power through life. He became a mathematician of the highest rank and used his knowledge of mathematics (*e. g.* logarithms) as an aid in calculating. He was, however, as we gather from his early beginning, a born calculator and one of the few cases in which calculating power and mathematical ability are found together. Here again the data with respect to work as a prodigy are meager.

FRANK D. MITCHELL, upon whom we have drawn most largely in our review of prodigies, himself had considerable aptitude for mental calculation and may be regarded as a minor prodigy of the natural type. His interest in calculation began at the age of 3 or 4 years. He learned to count to 10, then to 100, then beyond; also by 2's, 3's, etc. In the series 2×2 , $2 \times 2 \times 2$, 3×3 , $3 \times 3 \times 3$, etc., in short, the powers of the number by which he was counting were natural resting places and awakened his interest, so that before long he began to count in the power series of different numbers (2, 4, 8, 16, 32, etc.; 3, 9, 27, 81, etc.) for considerable distances. At first he simply emphasized the powers as they occurred in the *complete* series of multiples, but gradually he learned to omit the intermediate multiples and simply count in the power series proper: 2, 4, 8, 16, etc.; 3, 9, 27, 81, etc. But almost always when the number exceeded 100, he emphasized the last two figures and gradually got into the habit of ignoring all the others. Thus instead of saying 3, 9, 27, 81, 243, 2187, 6561, etc., he usually counted 3, 9, 27, 81, 43, 29, 87, 61, and in this simplified form counted along for considerable distances. It may be said here that M's mental calculations take the form almost exclusively of tracing the last two figures through the different operations ignoring all the other figures, the problems which he solves by preference being of the general form of finding the last two figures of any power (or integer root) of any number. Thus the counting cited above is a typical computation of the last two figures of the 8th power of 3 (6561). At first the process was 3, (6), 9, (18), 27, (54), 81, (62), 43, (86), 29, (58), 87, (74), 61. To make this procedure clear, I have worked out more details than Mitchell gives; for which, see foot note *. He would pass over the intervening multiples (in paren-

3	
$3 + 3 = 6$	
$6 + 3 = 9$	2d power
$9 + 9 = 18$	
$18 + 9 = 27$	3d power
$27 + 27 = 54$	
$54 + 27 = 81$	4th power

* Reinstatement of the Details of Mitchell's Scheme for raising 3 to the 8th power. It is especially to be noted that this is essentially an addition or counting method.

$81 + 81 = (1) 62$	
$62 + 81 = (1) 43$	5th power
$43 + 43 = 86$	
$86 + 43 = (1) 29$	6th power
$43 + 43 = 86$	
$86 + 43 = (1) 29$	6th power
$29 + 29 = 58$	
$58 + 29 = 87$	7th power
$87 + 87 = (1) 74$	
$74 + 87 = (1) 61$	8th power

thesis above) lightly, in time learning to omit them altogether and before long the process came to be simply 3, 9, 81, 61; that is, simply squaring each number to get the next, the intermediate counting taking place so rapidly and automatically as hardly to appear in consciousness at all except in brief flashes. And even these flashes may sometimes be almost absent, so that only the 3 and the 61 stand out, the rest remaining a mere blur.

Multiplication naturally grew out of this counting process, but it was really counting rather than multiplication proper since he did not learn the multiplication table until some time later when he went to school. Thus to find 9×7 at this time he would count 9, 18, etc., to 63, and even at the time of writing the article of which this is a review, except within the limits of the multiplication table as he learned it to 12×12 , his mental multiplications are abbreviated countings of this sort (skipping most of the intermediate links) rather than true multiplication. There is no reason to believe, says Mitchell, that at least two of the major prodigies ever got beyond this counting process, and that any of them with the possible exception of Gauss and Dase, used an enlarged table (memorized so as to be automatic in its action like the school table), and even in these two cases there is no direct evidence, only the bare possibility. The feats of such men as Buxton, Colburn, Mondeux, Dase, and Bidder (who belong to the *natural* family of great calculators) whose methods in the first instance took shape independently of books can be explained without presupposing a table reaching beyond 10×10 or 12×12 . The child who becomes a calculator begins to multiply soon after he learns to count; "his habits and

methods are definitely formed before a table beyond 10×10 is needed.

In the course of his calculations or countings a number of properties gradually attracted the writer's attention, such as that every power of a number ending with 0 or 5 ends with 0 or 5, that the 4th power of any other number ends with 1 or 6 according as it is odd or even, that the 5th power ends with the same figure as the first, the 6th power with the same figure as the 2d, etc., and that if 76 or any number ending with 76 is multiplied by a multiple of 4, the last two figures of the product are the same as those of the multiplier (*e. g.*, $12 \times 76 = 912$).

When the calculation takes account of all the figures, Mitchell's powers of mental arithmetic are little above the average. The multiplication of two-figure numbers takes him longer mentally than on paper and with three-figure numbers it is such an effort to remember the partial products that usually each one must be repeated aloud two or three times, and even then he is apt to forget the first partial product by the time he has found the third. With small two-figure numbers he can on paper, using one figure of the multiplicand at a time, multiply in a single operation, especially where the number is even, *e. g.*, 24 or 36. With 19 or 23, also, it would probably be easier to multiply in a single operation than in two operations in the ordinary way; but in such a case after the products exceed 100 the multiplication would often tend to resolve itself into counting, rapid and automatic, but counting nevertheless. Thus, up to $5 \times 23 = 115$, he would probably count by 23 directly, or depend on his memory; but after that, to pass to $6 \times 23 = 138$, he would first count in the 3, then the 20, thus reaching 138 from 115, via 118 and 128.

To square a number, as 162, which contains no prime factors except 2 or 3, he multiplies successively by 3, 3, 2, 3, 3 (486, 1458, 2916, 8748, 26244); in other cases of squaring comparatively small numbers he often uses the algebraic formula $(a + b)^2$.

(Prodigies — To be concluded.)

The Matter-of-Fact Pupil

HUBERT M. SKINNER

THE TEACHER entering upon her work, like a merchant purchasing a new store, makes it her first business to "take account of stock." She must ascertain, so far as possible, what her pupils, collectively and individually, already possess in the way of mental acquisitions. The family life varies so widely in a community that there is reason for careful observation here. In some homes there is little conversation, little consideration for childhood, nothing of literature or of art that is comprehensible to children. The homes of the wealthy may be dreary abodes. Even where the parents possess intellectuality of a high order, they may have little sympathy with childhood, their intellectual superiority removing them far from the plane which the minds of children occupy.

Two children from neighboring homes may be equally well dressed, equally healthy and bright, and, so far as externals go, equally favored in every way; while in fact the one has a home of affection and sympathy, of cheer and merriment, of conversation on all manner of subjects, of social gatherings, of souvenirs of travel, of correspondence with friends far away, of maps and books and art treasures—while the other has a silent home, well furnished perhaps, but with nothing of inspiration to the child mind, with only commonplace conversation and little enough of that.

The teacher soon learns to take all this into account on matters of instruction and discipline, adapting herself to the individual acquirements of each pupil. But there is something else to be taken into account: the temperament of the individual pupil. There is a type of child of which very little has been written or spoken, it would seem, but which is important to consider. That is the matter-of-fact boy or girl, born with Quaker tendencies, looking always for truth and reality, taking everything literally, and wholly unable to understand what other children apprehend at a glance by making allowance for exaggerations, conventionalisms, and shams.

The matter-of-fact child may have his tendency emphasized and developed by home training. If his parents are moderate and careful in their speech, avoiding exaggerations, abominating even trifling deceptions, inculcating exactness of statements, the child will form the habit of accepting as literal fact what he reads and hears. If he is accustomed at home to make allowance for habitual exaggerations, crude guesses, inaccurate reports, and wilful falsehoods, he will perhaps look for these in the instruction received from teachers and from books.

The slavish adherence to the textbook in American schools caused them for a time to be deemed almost infallible. What the textbook said must be true! And yet the textbook was often willfully or carelessly untrue. There has been a great gain in honesty as well as in accuracy in the preparation of the modern textbook. Middle-aged men can readily recall the time when purely fictitious or imaginary dates were supplied for assumed or legendary events of prehistoric time, such as the founding of Athens, the fall of Troy, etc.; when the pupil learned that Argos was built in 1856 B. C., exactly as he learned that the Republican party in this country held its first national convention in 1856 A. D., and received both dates with the same unquestioning confidence. It was held that if a writer of history should confess his ignorance in any matter, the reader would lose confidence in his scholarship; hence the necessity for assumption and fraud.

In this better day there is the utmost frankness in the confession of a want of knowledge in doubtful matters. No one hesitates to teach that even the time of the birth of Christ is incorrectly assigned to our chronology, and that He was born in the year 4 B. C. as we reckon time.

There is also a great advance in accuracy and consistency in statement. We no longer declare in our arithmetics that "the area is equal to the length multiplied by the breadth" without explaining that this is merely a convenient elliptical phrase, since the multiplier must always be an abstract number. No competent teacher will say that "52 weeks make one year," but rather that "52 $\frac{1}{7}$ weeks make one common year."

Some pupils, when grown to manhood, lose all faith in statistics. With each successive issue of a new geography they have found,

perhaps, a new statement of the area of their State, although its boundaries have remained unaltered. They learned in school that a section is a square mile, although, even in strict theory this can not be true, for the curvature of the earth requires the north line of the section to be shorter than the south line, and allowance must be made for all accidental errors in surveys.

To the matter-of-fact pupil it is discouraging to unlearn or modify much that he has learned with conscientious care. The folklore of the schoolroom contains the legend of the child who pathetically remarked, "I'd rather not know so much than to know so many things that ain't so." The matter-of-fact child may not have a dislike for fable and fairy tale, but he does desire to have a clear line of distinction drawn between fiction and fact. Teachers need not be Quakers in their speech, but they should make use of conventionalisms in such a way as not to deceive.

Teachers and parents who say they assume that the child "ought to have some sense" are often provoked at what they deem stupid misconceptions of facts due to the implicit confidence which some children have in what is told them, monstrous as the misconceptions may be. They do not stop to consider that to a young child all is miracle.

If the father, lying in his bed at night, can reach for a telephone and converse with a man in another city, why should the child doubt any statement that he hears or seems to hear? Could there be a greater miracle? This thought may be applied even to adults. There is a story (apocryphal, of course) that a Vassar girl who had had remittances of money sent to her by wire from New York City, through the bank, requested in a sudden emergency that a new hat be sent in the same way. Who shall say that parcels may not yet be sent with a speed now incredible?

It is with young children, however, that this paper has to deal especially; and as actual examples are forcible for illustration, here are two that will answer, and that will call up in the mind of the reader like instances in their own experience with children.

At the time of the St. Louis Exposition, when every child in the city was thrilled by the newspaper pictures and accounts of the savage, "man-eating Igorrotes" from the Philippine Islands (the most sensational feature of the whole Exposition), a stately lady

had, one day, a young grandchild seated at her side at the dinner table, and paid him considerate attention. On cracking an almond for him, she found in it two kernels, and she bethought herself of the old game of "eating philopoenas." She divided the kernels with him, and began to say about as follows:

"My dear, when grandma was a girl, if this happened to a boy and girl eating almonds together, they would eat a philopoenas, as I have often done."

The child opened his eyes wide in wonder, which was taken merely for interest in whatever his beloved grandma might say.

"I will explain to you how we did it," she added. But something occurred to interrupt the conversation at the time, and the explanation was indefinitely deferred.

Subsequently, when the grandchild at the kindergarten heard his playmates tell, in child language, of the horrible Cannibalism imputed to the savage Filipinos, he exclaimed:

"That's just what white folks used to do when grandma was a girl. She has eaten Igorrotes herself. She told me so."

That the refined, gentle lady had been a Cannibal was more credible to him than that she could now tell an untruth; and he had understood her to say in her girlhood she had eaten *Filipinos*.

Very recently a little boy who returned tardily from a walk in the street explained his delay by telling of a very strange and (in the end) disappointing event that had happened. A horse in the street had become sick and disabled. He stopped to see what would happen. Men gathered, and ordered a messenger to go and bring a *horse doctor*. (Here, now, was to be witnessed something wonderful in the animal world. How could a *horse doctor* feel the pulse of his patient? Would it be with his hoof? A horse could ask no questions. What would it do? Would it put its big ear close to the sick animal's heart?). The boy waited with high-keyed expectation to see the wonderful animal of the medical profession. "So you waited to see what the doctor would do to the sick horse?" asked the mother with interest, not knowing the strange misapprehension of the child. "Yes, Mamma," answered the boy in a tone of disgust. "I waited to see the horse doctor, and what do you think it was? *It was only a man.*"

If the men had said "a doctor of horses," the child would have

understood them correctly; but to him a horse doctor meant, literally, a horse that was a doctor. Our language is full of such expressions, susceptible of a double meaning; and with the matter-of-fact child we must use care in seeing that these are not misunderstood.

If this readiness to accept preposterous interpretations of what is said were confined to the nursery, we might regard it as a passing phase of infancy, with which the teacher has nothing to do. But with many this tendency to literalness does not pass quickly away. With some, it lingers through life. It is largely a matter of temperament and of environment in early life. The successful teacher will take it into account in dealing with pupils as a class, and especially in dealing individually with the matter-of-fact pupil, whom a little discernment will enable her to recognize and point out among his fellows.

Study of Man in Connection With Establishing Laboratories to Investigate Criminal, Pauper, and Defective Classes

By Arthur MacDonald, Washington, D. C.

Honorary President of the "Third International Congress of Criminal Anthropology," of Europe

THE STUDY of man includes abnormal as well as normal man. The fundamental conception of the abnormal is *excess* of the normal. When the normal acts in an unfit way, or at the wrong time or place, it may become abnormal. The abnormal is potentially in the normal and is further distinguished from the normal by unequal or less consistency. All that is pathological is abnormal, but not all that is abnormal is pathological. Thus a hand with six fingers is abnormal, but not necessarily pathological.

From normality to abnormality there are many stages, and the difference between these stages is one of degree, and this difference in degree can become so great as to result in a difference in kind. Just as in mixing two chemical fluids, when the quantities reach a certain amount a precipitate is formed which is very different from the ingredients from which it was deposited. These stages constitute what may be called an intermediate zone. In this zone are those who are slightly abnormal mentally, morally, or criminally. Their status may vary with the environment. Thus unfortunate surroundings are liable to develop their abnormalities, while under favorable circumstances, the abnormal may become normal again. Also a man's environment may be abnormal rather than the man himself.

Abnormal man may be abnormal in the right direction, as genius man, talented man or statesman; or in the wrong direction, as

criminal, pauper, defective, or mattoid¹ man. It is all *man*, and the study of these different classes might be called the anthropology of the living, as distinguished from that of the dead.

To study abnormal man we must investigate normal man at the same time. For we should know the normal in order to comprehend the abnormal; also the methods of investigation should be similar, for we must have some general criterion or measuring rod to distinguish between them. It is more important to study genius, talent, and statesmanship than it is to investigate crime, pauperism, and defectiveness. For to learn how to become useful, talented, and brilliant citizens is much more advantageous than to discover what causes life's failures. But as society must *first* protect itself, the abnormals in the wrong direction, especially those who are dangerous, need attention first. For however insignificant such abnormals may be in themselves, they are important only on account of the injury they can do.

Criminals, paupers, mattoids, and other defectives are social bacilli, which require as thorough scientific investigations as the bacilli of physical diseases.

A Plan For the Study of Man*

The greatest of all studies is that of man himself as he is today. A scientific investigation of man must be based primarily upon the individual, who is the unit of the social organism.

If we are ever to have sufficient definite knowledge of living human beings that may become a science, it can only be done by the careful study of large numbers of individuals. The more thorough the study and the larger the number, the more useful such investigation can be made to society.

¹ The mattoid (or crank) is an abnormal, characterized by the want of balance; is eccentric and egotistic and may be sane or insane, or simply illused, or dangerous or harmless.

For further description of types of mattoids, see articles (by writer), entitled "Mattoids," in the "Medical Fortnightly" for April 25, 1911, St. Louis, Mo., and "Assassins of Rulers," in "Journal of American Institute of Criminal Law and Criminology," Vol. II, No. 4, Chicago, Ill.

* Published in the Proceedings of the "Imperial Academy of Sciences of St. Petersburg."

As in machinery we must first repair the wheels out of gear, so in society we must first study the criminal, crank, insane, inebriate or pauper who can seriously injure both individual and community. Thus a worthless crank, by killing a prominent citizen, can paralyze the community. The injury from such action is often beyond calculation. Governments pay out millions to catch, try, and care for criminals, but give very little to study the causes that lead to crime.

The study of man, to be of most utility, must be directed *first* to the *causes* of crime, pauperism, alcoholism, degeneracy, and other forms of abnormality. To do this the individuals themselves must be studied. As the seeds of evil are usually sown in childhood and youth, it is here that all investigation should commence, for there is little hope of making the world better if we do not seek the causes of social evils at their beginnings.

The most rigid and best method of study of both children and adults is that of the laboratory, with instruments of precision in connection with sociological data. Such inquiry consists in gathering sociological, pathological, and abnormal data as found in children, in criminal, pauper, and defective classes, and in hospitals. Such experiments or measurements should be made as are of interest not only to sociologists, psycho-physicists, and anthropologists, but also to physiologists and pathologists.

Questions as to Utility¹

But, it may be asked, what as to the utility of studying such questions? We think it is not only useful, but there is great need of such investigation. We should like to inquire, for instance, as to the utility of studying rocks and plants, arranging them, making chemical analyses of them, etc., if it is not to give a deeper knowledge of them and thereby learn more about our planet? So the patient and extended study of man, especially children, is to gain more definite knowledge about him and a deeper insight into his nature. The time has certainly come when man, as he is, should be studied as much as nature.

Much money has been given and great interest manifested for

¹ From "Criminology" (by writer).

the discovery of new chemical elements or the search for unknown planets. We erect statues and found art galleries at great expense. These things may not all be *immediately* useful. Indeed, the highest art spurns even the idea of utility; and yet when it is proposed to study a child thoroughly to gain an insight into its nature, to find the causes of its defects, so that we may protect it and help it to become a good citizen, the utilitarian cry is heard. The time has come when it is important to study a child with as much exactness as we investigate the chemical elements of a stone or measure the mountains on the moon.

If facts about children, whether immediately useful or not, are not important, we desire to ask what is important in life?

Some Conclusions as to Criminal Man¹

The following statements as to the criminal are not based upon experimental research so much as upon the experience of those who have studied criminals directly or who have had practical control of large numbers in prisons or reformatories:

1. The prison should be a reformatory and the reformatory a school. The principal object of both should be to teach good mental, moral, and physical habits. Both should be distinctly *educational*.

2. It is detrimental financially, as well as socially and morally, to release prisoners when there is probability of their returning to crime; for in this case the convict is much less expensive than the ex-convict.

3. The determinate sentence permits many prisoners to be released who are morally certain to return to crime. The intermediate sentence is the best method of affording the prisoner an opportunity to reform without exposing society to unnecessary dangers.

4. The ground for the imprisonment of the criminal is, first of all, *because he is dangerous to society*. This principle avoids the uncertainty that may rest upon the decision as to the degree of freedom of will; for upon this last principle some of the most brutal crimes would receive a light punishment. If a tiger is in the street,

¹ See article (by writer) entitled "A Laboratory for Sociological, Medical, and Jurisprudential Purposes," in *Amer. Law Review* for Nov.-Dec., 1901, St. Louis, Mo.

the main question is not the degree of his freedom of will or guilt. Every man who is dangerous to property or life, whether insane, criminal, or feeble-minded, should be confined, but not necessarily punished.

5. The publication in the newspapers of criminal details and photographs is a positive evil to society, on account of the law of imitation; and, in addition, it makes the criminal proud of his record, and develops the morbid curiosity of the people; and it is especially the mentally and morally weak who are affected.

6. It is admitted by some of the most intelligent criminals, and by prison officers in general, that the criminal is a fool; for he is opposing himself to the best, the largest, and the strongest portion of society, and is almost sure to fail.

I suppose it is unnecessary to attempt to settle the question as to which is better worth educating, the men or the women. They both ought to have the fullest education that the nation and the community can afford, but if I had to decide the question and settle specifically the question as to which is better worth educating, I think I should decide in favor of the women, for the simple reason that while many educated men might tolerate an uneducated woman, I think very few educated women would tolerate for a long time an uneducated man. There is not much danger of the boys being uneducated if the mothers are educated.—*Daniel F. Houston, Secy. of Agriculture.*

Book Mention

The Waterboys and Other Stories. By Charles D. Lewis. Printed for the author by The Berea College Press, Berea, Kentucky. Paper, 25 cents.

These stories are imaginative, yet scientific. The paradox is easily understood. Facts of science presented in story form in which the element of imagination is prominent are made as amusing as the airy creatures of the old-time fairy tale. The author's purpose is to help the teacher in the rural schools to accomplish the mission of bringing "The Abundant Life." The book need not be limited to those teaching in rural districts as the beautiful ways of nature are everywhere to be studied and admired. This edition is for the use of the teacher but we are promised a later edition in better binding, fully illustrated, intended for the children. The author should be encouraged to proceed with this plan as the stories are in every respect worthy such treatment. Pretty fancies woven about truths of science minister graciously to the imagination and assist the understanding. The child mind will quickly respond to such an appeal.

The Fundamental Basis of Nutrition. By Graham Lusk, Professor of Physiology, Cornell University Medical College and Scientific Director of the Russell Sage Institute of Pathology. Gale University Press. 50 cents. Postage 4 cents.

A lecture delivered in November, 1913, as the Anniversary Address of the New York Academy of Medicine thus makes its appearance in book form. Instructive material having to do with the principles of nutrition is given in six chapters, plus an index. Chapter VI has to do with the monetary value of foods and contains some suggestive statistics and comparisons including a table showing food values of portions served in Child Restaurants. The author would have us ordering calories rather than portions. "Suppose the pot of Boston baked beans, as sold, were guaranteed to contain 1,000 calories, 12 per cent in protein, the workman would

then know what he was getting for his money, if he only were taught the simplest elements of the subject of nutrition." The book is one to be commended for its clear, practical, brief, yet sufficiently technical handling of a subject of utmost importance.

Teaching Sex Hygiene in the Public Schools. By E. B. Lowry, M.D. Forbes and Company, Chicago. 50 cents net.

A brief, fearless, common-sense statement of a vital subject. The author advocates a course of study for Normal schools, teaching how to improve the race stock of our country. It is evident that if such questions are to be considered in our public schools, teachers must themselves be educated to understand and to teach them. The subject lends itself readily to over-emphasis at times and places, and even Dr. Lowry is not without fault in this particular. Sex problems and the methods of teaching immature minds concerning them remain matters of great concern to educators. Dr. Lowry is rendering valuable service in his straight-forward scientific treatment of the theme.

Laboratory Manual for Human Physiology. Experiment Studies in Hygiene Sanitation and Physiology. By Carl Hartman, Instructor in Zoology, University of Texas. Illustrated. List price, 60 cents; mailing price, 72 cents. World Book Company, Yonkers, New York.

This manual is a manual indeed. It is designed to be used with Ritchie's Human Physiology. Every possible direction and suggestion to assist the worker in the laboratory seems to be included. The apparatus and material are explained in detail and the complete process of the demonstration described in each case. One excellent feature is the consideration of economy in the apparatus and materials used. The demonstrations can therefore be carried out with but trifling expense. The book is the result of the work of the committee of Chicago School Principals and Teachers in preparing a manual for their own use.

City School Supervision. A constructive study applied to New York City. By Edward C. Elliott, Professor of Education and Director of the course for the training of teachers in the University of Wisconsin. One of the School Efficiency series, edited by Paul H. Hanus. World Book Company. \$1.50 postpaid.

The author bases his recommendations on information derived from documentary material, special conferences, visitation of schools and critical examination of methods of various supervisory boards. He makes four recommendations for reorganization. Dr. Hanus singles out two of these as vitally affecting the future welfare of school administration, namely, the recommendation for a Department of Investigation and Appraisal, and that for a Supervisory Council, consisting of officers and teachers. All interested in problems of City School Administration will naturally desire to possess this volume.

Easy Road to Reading. A Book of Letters and Numbers.

Easy Road to Reading. A Book of Children.

Easy Road to Reading. A Book of Animals.

Easy Road to Reading. A Book of Fun and Fancy.

All by Louise Beecher Chancellor. Edited by William E. Chancellor. Paper covers, 48 pages. Postpaid 12 cents each. World Book Company.

Dr. Chancellor writes: "This series was begun originally by my wife, Louise Beecher Chancellor, for our own children. The materials grew upon her hands until their extent suggested some form of publication. When issued, they were the first books of paper-cutting for children. The present is the third edition, carefully revised and improved in the light of trial and experience."

These books may be heartily recommended as primers and first readers. The road to reading could hardly be made pleasanter. Paper-cutting, verses, simple sentences, easy vocabulary and well selected subjects all help to give charm and effectiveness to the series.

Tales Told in a Menagerie. By Alice Lotherington, Teacher, New York City. Published under the direction of Charles H. Davis, Principal, New York City. Introduction by Dr. Edgar Dubs Skinner, District Supt., New York City. Illustrated by Caroline M. Field, Special Teacher Drawing, New York City. 8 3/4 x 6 5/8. 60 cents postpaid. Educational Magazine Publishing Company, 31-33 E. 27th Street, New York City.

Miss Lotherington has given us something new in the line of animal stories. As a supplementary reader, or as a story book for

general use, we know of nothing that will give quite so much amusement and useful knowledge at the same time. In fact it would not be claiming too much to say that we have here a textbook on natural history suitable for use in a number of grades. The animals talk, not silly baby talk, but give in direct simple language their history, going back to the scenes of their natural habitats. Principals, teachers and parents can make no mistake in selecting this book for school and home use.

Fifty-ninth Annual Report of the Board of Education of the City of St. Louis, Missouri. For the year ending June 30, 1913.

This report is in the form of a cloth-bound volume of 638 pages, with statistics, tables, illustrations, diagrams, etc., galore. It is one of the most comprehensive reports ever sent to the reviewer's desk. It is one of which the Board of Education, and especially the Superintendent of Instruction, Mr. Ben Blewett, may entertain reasonable pride. Congratulations to St. Louis, Missouri.

New York University German Travel Study Tour

The interesting itinerary offered by the German Travel Study Tour of New York University has tended to make this a very popular form of summer work for teachers judging from the large number who are planning on taking the course. The party will leave New York on July 2d on the North German Lloyd S.S. *Barbarossa* due in Bremen on July 12. The itinerary in Germany includes Berlin, Dresden, Leipsic, Halle, Jena, Nuremberg, Munich, Heidelberg, Mannheim, Frankfurt and Cologne. In each of these cities the various types of German schools will be visited. Committees of prominent German educators have been organized in each city and will co-operate in this work. Students who complete the required reading and submit a satisfactory thesis will be given credit towards a degree for the work. The main party will reach New York on their return on August 17, but those who desire to make a longer trip may take one of the extensions which have been planned through Switzerland and France, and Belgium and France requiring a weeks more time.

Literary Snap-shots

By Mary Eleanor Kramer

The Golden Spears and Other Fairy Tales: This is a book of absorbing interest for children, and will be read with pleasure by grown-up people. Teachers will be delighted with it. The author, Edmund Leamy, writes understandingly of fields and flowers, birds and blue skies. The book has real literary merit, the style being graceful and well adapted to the child mind. There are seven stories in the volume, each with an attractive illustration drawn by Corinne Turner.—(*The Golden Spears and Other Fairy Tales*, by Edmund Leamy. Desmond FitzGerald, Publ.)

* * * * *

"The Carpenter and the Rich Man": This book is the logical successor of "The Call of the Carpenter." In this book, the author, Bouck White, holds up the needle's eye to an opulent modern society and asks, "Who shall pass through it more readily today than the rich man of the Bible"? Christ, the working man, the opposer of privilege, the champion of the poor, the hater of riches, looms up large in these pages. The book is a call for a new religion and the true democracy of Christ.—(*The Carpenter and the Rich Man*, by Bouck White. Doubleday Page & Co.)

* * * * *

Dr. Joseph Kossuth Dixon, author of "*The Vanishing Race*," which tells of the American Indian, recently returned from a journey to all the one hundred and eighty-nine Indian tribes in the United States. As leader of the Rodman Wanamaker expedition of citizenship, Dr. Dixon carried to each tribe an American flag, taking it as a symbol of the new brotherhood which from henceforth this country hopes to extend to the Red Man. The

Indian, says Dr. Dixon, is a man of mysticism, a lover of symbols. Even his clothing is symbolic. His marriage ceremony, from which missionaries have tried to wean him, is one of the most touching and poetic rites in the world. Every little change in the inscrutable face of Nature is to him full of a deeper meaning. The cloud in the sky, the wind in the grass, the flight of a bird, the behaviour of an insect—all these tiny and intimate movements on the World-face are to him as smiles or frowns.

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"Forty Years of It": Brand Whitlock's volume is in a sense a history of the progress of democracy in the Middle West. His reminiscences are of such men as Governor Altgeld, Tom Johnson, and "Golden Rule" Jones. In one chapter Mr. Whitlock gives a glimpse of the old Whitechapel Club of Chicago, which numbered among its members such men as Peter Finley Dunne, George Ade, Opie Reed, Ben King, Alfred Henry Lewis, Upham Adams, Horace Taylor and Wallace Rice. The club was founded late in the eighties, and during the ten years of its existence it was one of the most remarkable of all the Bohemian clubs. It had its rooms in the rear of a little saloon in Chicago's "newspaper alley." For a time the club was nameless, but one afternoon a group was sitting in one of the rooms when a newsboy passed through the alley and cried: "All about the latest Whitechapel murder"! Charles Good-year Seymour paused with a stein of beer half lifted, and said: "We'll call the new club the 'Whitechapel Club.'"

Few reminiscences have had the vigor, optimism, and personal appeal of Mr. Whitlock's pages.—(*Forty Years of It*, by Brand Whitlock. D. Appleton & Co.)

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A Dictionary of Abbreviations: A Dictionary of Abbreviations giving the meanings and, where necessary, the derivation of an extensive list of short forms in ordinary and technical use, has been prepared by the late Walter T. Rodgers, and issued by the Macmillan Co.

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In the March issue of the *Bookman* there appeared the first installment of a delightful series of papers on "Kipling's India"—the territory covered being "Anglo-India"; the second paper describes the Borderland and Desert. No teacher should miss this series.

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Our Friend John Burroughs: The increasing thousands of lovers of John Burroughs and his writings will welcome this intimate book about the man, his life and personality. Dr. Barrus has been for many years Mr. Burroughs' friend and helper and has had the assistance of the great naturalist in the composition and preparation of the book. A picturesque and vivid account of his youth, written by Mr. Burroughs himself, is a prominent and important feature. His reminiscences of Emerson, Holmes, Whittier and Whitman, will delight the hearts of all real literary people. The chapter describing the visit of John Muir and Mr. Burroughs to the Petrified Forests of Arizona, the Grand Canon of the Colorado, and the Yosemite Valley is alone worth the price of the book. In speaking of his boyhood Mr. Burroughs says: "I can remember Mother's loom pounding away hour after hour in the chamber of an outbuilding where she was weaving a carpet or cloth. I used to help do some of the quilling—running the yarn or linen thread upon spools to be used in the shuttles. The distaff, the quill-wheel, the spinning-wheel, the reel, were very familiar to me as a boy; so was the crackle, the swingle, the hetchel, for Father grew flax which Mother spun into thread and wove into cloth for our shirts and summer trousers, and for towels and sheets. Wearing those shirts, when new, made a boy's skin pretty red. I dare say they were quite equal to a hair shirt to do penance in; and wiping on a new home-made towel suggested wiping on a brier bush. Dear me! how long it has been since I have seen any tow, or heard a loom or spinning-wheel, or seen a boy breaking in his new flax-made shirt! No one sees these things any more."

Of importance to the bibliographer are interesting examples of some of Mr. Burroughs' earlier and little known writings.—(*Our Friend John Burroughs*, by Clara Barrus. Houghton Mifflin Co.)

Among the entertaining stories published recently for young people are "The Boy Woodcrafters," by Clarence Hawkes; "The Boy Scouts on Swift River," by Thornton Burgess; "Sonnie-Boy's People," by James B. Connelly; "When I Was a Little Girl," by Zona Gale, and "Peter and Polly in Winter," by Rose Lucia.

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Earmarks of Literature: This book is based on a series of lectures given first to the training class of the Brooklyn Public Library, afterward to that of the New York Public Library, and finally to the St. Louis Public Library. The things which make good books good, are here made clear and interesting. Opening with a chapter on the nature of literature, studies of the grammatical form, clearness, appropriateness, and character of style follow. The author is Arthur E. Bostwick, Ph.D., Librarian, St. Louis Public Library.—(*Earmarks of Literature*, by Arthur E. Bostwick. A. C. McClurg & Co.)

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"The Treasure": This is another of Kathleen Norris' stories of Home, a solution of the vexed "servant problem." How Justine Harrison, graduate of the American School of Domestic Science, solved the problem of domestic service for the Sailisburys, is here depicted; it is a story of the old and new feminine ideals, and told as only Kathleen Norris can tell such a story.—(*The Treasure*, by Kathleen Norris. The Macmillan Co.)

* * * * *

Better Rural Schools: This book is an attempt to interpret the rising tide of interest in the rural school, and to offer whatever help it may be guiding the energy in fruitful lines. It is written especially for rural teachers and administrators in their reading circles, normal schools and study classes. The book is simply written consequently is easy and attractive reading. It touches on such questions as the teacher must daily meet, hence is most practical. The motive of the entire volume is constructive. The scope of the

book is broad. It interprets the relation of the curriculum to efficiency in education, and shows the reorganization necessary in the rural course of study. No rural teacher can afford to miss this work.—(Better Rural Schools, by George Herbert Betts, and Otis Earl Hall. Bobbs Merrill Co.)

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Your Child Today and Tomorrow: This is one of the most important books of the spring, treating, as it does, of that most important of all subjects—the training of the on-coming generation. It is a book for mother, teacher, preacher, and Sunday School worker. There are fourteen chapters, all replete with wisdom and helpful ideas. Some chapter headings are: The Problem of Punishment; The First Great Law; The Lies Children Tell; Children's Gangs, Clubs, and Friendships; Children's Ideals and Ambitions, and The Stork or the Truth.—(Your Child Today and Tomorrow, by Sidonie Matzner Gruenberg. J. B. Lippincott Co.)

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Mother Love: Teachers desiring suitable material for the celebration of Mother's Day, should procure a copy of Ina Russelle Warren's beautiful volume—"Mother Love—A Book of Heart." This book is most attractive both in appearance and contents, a rather unusual combination these days, when, so many attractive appearing volumes, are like ornate apartment houses, the best being on the outside. The decorations are by Jane Allen Boyer. This is a book that will delight mothers as well as teachers. There are pages for a Mother's record of the events in Baby's life. The best in literature relating to mother-love and devotion has been culled and combined in this little book.—(Mother Love, by Ina Russelle Warren. Geo. W. Jacobs Co.)

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Teachers of Chicago enjoyed a rare treat during March in the lectures of S. S. McClure, on "The New Education," being a description of the work being done by Dr. Montessori, in Rome. Mr.

McClure recently spent some months in Italy, and while there studied the Montessori system. His lectures were enlivened by moving pictures of the schools in operation.

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The death of Thomas W. Henshaw, on the eve of the publication of his latest book, is particularly sad. He died suddenly in London where he had lived for more than twenty years. His "Cleek" stories are now being published in magazine form. Just previous to his death he had made a visit to this country to see "Cleek" portrayed in the "movies."

Mr. Henshaw was a native of Brooklyn, where he was born fifty-seven years ago. At the age of ten he wrote a play which was performed by the children of his school. At sixteen he went on the stage and played juvenile parts for several years in Ellen Terry's company. After this he appeared with Clara Morris and Adelaide Neilson in leading roles. One of the best known of his literary productions was "The Wedded Widow." His latest book, "Cleek of Scotland-Yard," has just been published by Doubleday, Page & Co.

* * * * *

Mrs. Harriet T. Comstock tells a pathetic little story of a recent happening in the Virginia mountain district which she describes in "A Son of the Hills." The incident is narrated in a letter sent by Mrs. Comstock to a Virginia friend. "The Bear House" referred to, was the old cabin that Mrs. Comstock hired, and in which she lived while writing "A Son of the Hills." It was on the road over which "'dat damyankee Massa Sheridan' rode," to describe it in the popular vernacular of the region.

"We have a family of mountaineers living in The Bear House now, and last night they had a big wedding down there. The bride fourteen and the groom eighteen.

"I played the wedding march on an old tin pan of an organ. I wish you could have seen that wedding. The bride was dressed in a shirt waist and skirt with a bridal veil on. They sent for me to fix the veil, so I went down, and it was such stiff chiffon I could

hardly manage it. Both the contracting parties were chewing gum for dear life during the ceremony and looking everywhere but at the minister. Some one asked the bride why she was marrying so young, and her answer was: 'Because I'm going to get married while I can. Grandma, mamma, or none in my family ever was married.' "

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Of special and timely interest is Florence Howe Hall's book entitled "Julia Ward Howe and the Woman Suffrage Movement." This comprises selections from the speeches and essays of this lover of freedom, with introduction and notes by her daughter.—(Dana Estes & Co.)

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S. W. Gillilan, a popular Chautauqua lecturer, claims to have written the shortest poem in the world. The subject is "Germs," and here is the poem:

Germs

Adam
Had 'em.

Ten Sets of Questions and Answers in Civics From Examinations in Ten Different States

I

1. Name the two houses of Congress. How are the members of the two houses chosen?

I

The Senate, chosen by legislatures of the states. The House of Representatives, chosen by direct vote of the people.

2. Show by example the difference between direct and indirect taxes.

2

When a man pays a poll tax he pays a direct tax; when he buys a cigar he pays an indirect revenue tax.

3. State the requirements for eligibility to the office of president.

3

Must be thirty-five years old, a natural born citizen of this country and fourteen years a resident of the United States.

4. What is the president's message? Briefly describe it.

4

An annual message sent by the President to both houses of Congress. It reviews the public events of the previous year; gives information of the state of the Union, and recommends the passage of such laws as he deems necessary.

5. What is the chief provision of the system of civil service? Give an argument in favor of the system.

5

A competitive system of appointment to minor national offices. It prevents the political preference method of selecting incompetent officers.

6. Name three important powers denied by states.

6

States are forbidden to enter into treaties, lay duties or to make war.

7. What is a party "platform?"

7

A party platform is a declaration of party principles.

8. What is a plaintiff? What is a defendant?

8

A plaintiff is one who enters charges in a suit; a defendant, one who defends himself from charges.

9. What is a petit jury? A grand jury?

9

A petit jury is one selected to try cases; a grand jury is one that brings indictments.

II

1. The President has power "to grant reprieves and pardons for offenses against the United States." Is there any exception? If so, what?

I

Yes. In cases of impeachment.

2. How can a new state be constitutionally formed from parts of two states?

2

By the consent of the legislatures of the states concerned, as well as of the congress.

3. Name three powers of the House of Representatives not given by the constitution to the Senate.

3

The House of Representatives has the sole power of originating bills for revenue, of impeachment, and of electing their officers.

4. Name two powers given by the constitution exclusively to the Senate.

4

The Senate has the sole power of confirming appointments made by the President; of trying all impeachments.

5. If a new treaty is made with Russia, how must it be made?

5

The treaty would be negotiated by the agents of each government, under the direction of the chief rulers. It would then have to be confirmed by a two-thirds vote of the Senate.

6. A few years ago Kansas and Colorado had a controversy as to the waters of the Arkansas river. What court had jurisdiction in the case?

6

The Supreme Court.

7. Should a vacancy in a federal office occur after the Senate has adjourned, and the President appoints some one to fill the vacancy, when does the commission granted expire, when the Senate meets or at the end of the session?

7

At the end of the session.

8. When are senators and representatives privileged from arrest? What exceptions are made?

8

During their attendance at the session of their respective houses, and in going to and returning from the same. Except in case of treason, felony or breach of the peace.

III

1. Name the kinds of paper money in circulation.

I

Gold and silver certificates, United States notes, treasury notes, and national bank notes.

2. What is the "elastic clause" of the constitution, and what is its importance in the history of our government?

2

Clause 18 of section VIII, in which Congress is given the necessary power to make all laws necessary to carry into execution the powers vested in it by the Constitution.

3. What is a postal savings bank?

3

A postal savings bank is a postoffice where money may be deposited by patrons.

4. Distinguish carefully between the jurisdiction of the Federal courts and that of State courts.

4

The Federal courts deal with cases pertaining to the United States; the State courts with those coming under the jurisdiction of the State.

5. What Congress is now in session? Is it the long or short session?

5

The long session of the Sixty-Second Congress.

IV

1. Into what departments is the government of the United States divided? State the general duties of each.

1

Legislative, to enact laws. Judicial, to interpret laws. Executive, to enforce laws.

2. (a) Name the cabinet offices, (not the persons occupying them).

(b) How are the cabinet officers selected?

(c) Give the principal duties of the secretary of state.

2

(a) Sec'y of State, Sec'y of Treasury, Sec'y of War, Atty. Gen., P. M. Gen., Sec'y of Navy, Sec'y of Interior, Sec'y of Agriculture, Sec'y of Commerce and Labor. (b) Appointed by the President and confirmed by the Senate. (c) He preserves public documents, has charge of correspondence with foreign countries, affixes the great seal of the United States, issues passports, and negotiates treaties.

3. Give the following facts regarding the president of the United States:

(a) How nominated?

(b) Election?

(c) Qualifications?

3

(a) By a national convention. (b) By an electoral college. (c) Must be a natural born citizen, thirty-five years old, and fourteen years a resident of the United States.

4. (a) How are representatives in Congress elected?
(b) State their qualifications.
(c) What is their term of office?

4

(a) By direct vote. (b) Must be twenty-five years old, a citizen of the United States seven years, and an inhabitant of the state from which he is chosen. (c) Two years.

5. Explain the following:

(a) Initiative.

(b) Referendum.

(c) Recall.

(d) Name two states or cities that have adopted the initiative, referendum and recall.

5

(a) The power of the people to directly initiate a law. (b) The power of the people to directly render a state law null and void. (c) The power of the people to recall an officer before his term has expired. (d) Oregon and New Mexico.

V

1. Briefly describe the method now in use for nominating candidates for president of the United States.

I

County conventions are held to choose delegates to a state convention. The state convention selects delegates to a national convention. The national convention nominates a president.

2. How are the United States senators elected? Show how the constitutional method has been modified in Texas and in some other states.

2

(a) By the state legislatures. (b) In many states binding primaries, which indirectly elect senators, are held.

3. Define direct taxation, indirect taxation, illustrating each.

3

The direct tax is levied directly upon property or polls; such as a tax on real estate. An indirect tax is assessed upon the property of one person, but is indirectly paid by another; such as tax on whisky.

4. Define legal tender, gold certificate, National bank note.

4

Legal tender is that which may be given and must be received as payment for a debt. A gold certificate is a treasury note payable in gold. A national bank note is issued by a bank which is chartered by the national government.

5. Mention five cases of different character which come under the exclusive jurisdiction of the Federal courts.

5

Cases under postal laws. Crimes against the United States. Prize cases. Violation of revenue laws. Suits to recover possession of an office.

VI

1. (a) What is the primary purpose of government? (b) What is meant by civil government?

I

(a) To protect the weak and to restrain the strong. (b) The government of a people in a peaceful state.

2. For what term is our governor elected? What is his salary?

2

Two years. \$5,000.

3. How many grades of courts are there in this State? Give the names of each.

3

Circuit Court, County Court, Criminal Court, and District Court.

4. Name two powers denied the states by the United States Constitution.

4

Power to coin money and to make war.

5. What is the difference between qualifications for United States senators and representatives?

5

Representatives must be twenty-five years of age, seven years a citizen of the United States and resident of the State from which he is chosen. A senator must be thirty years of age, nine years a

citizen of the United States, and a resident of the State from which chosen.

6. Distinguish between a civil and a criminal action.

6

A civil action is for the recovery of money or property; a criminal action carries with the conviction the penalty of a fine, or imprisonment, or both.

7. State some of the rights of a person accused of crime.

7

The accused has the right of a speedy trial by jury; he has the right to compel witnesses to appear in his behalf, to legal advice, to be confronted with his accusers, and to the benefit of all doubt as to his guilt.

VII

1. How does the United States raise money to pay the running expenses of the government?

I

By duties on imported goods; by internal revenues; by sale of postoffice revenue.

2. What is meant by the terms free trade and tariff for protection?

2

Free trade means the shipping of goods from foreign countries free of duties. Tariff for protection means a tariff that will prevent foreign goods from coming into competition with products of this country.

3. Tell how the United States acquired Florida, Texas, Alaska, California.

3

1. By purchase. 2. By annexation. 3. By purchase. 4. By cession and by purchase.

4. Tell how the president is elected and give his duties and powers.

4

The president is elected by electors chosen by popular vote. He is commander-in-chief of the army and navy of the United States;

he may grant reprieves and pardons for offenses against the United States; he may make treaties, appoint officials, convene Congress, recommend measures to Congress, sign or veto bills, and see that the laws are executed.

VIII

1. Define or explain the following: Nation, ex post facto law, caucus, treaty.

I

1. A people as an organized body politic. 2. A law making or increasing a punishment for a crime committed previous to the passage of the law. 3. A meeting of the leaders of a party to decide upon a course of action. 4. A formal agreement between nations.

2. In what two ways may amendments to the United States Constitution be (a) proposed; (b) ratified?

2

(a) By a two-thirds vote of both houses of Congress or by a convention called upon application of the legislatures of two-thirds of the states. (b) By the legislatures of three-fourths of the states or by conventions in three-fourths of the states.

3. Mention five rights secured by the Constitution to persons accused of crime.

3

The right of a speedy trial; a trial by jury; to be confronted by his accusers; to compel witnesses to appear in his behalf; the right to legal advice.

4. Describe briefly the process of admitting a new State to the Union.

4

A territory sends a memorial to Congress; Congress passes an enabling act; the territory forms a constitution; Congress passes a bill of admittance; the President signs the bill.

5. Mention five things forbidden a State by the Constitution of the United States.

5

To coin money; to make treaties; to declare war; to levy customs, and to discriminate against the products of another state.

IX

1. Explain the following terms: Monroe Doctrine, Reciprocity, Initiative and Referendum, Protective Tariff, Presidential Electors.

I

(1) The doctrine first promulgated by President Monroe that any attempt by an European power to gain a foot-hold in America would be resisted by the United States. (2) A mutual trade concession between nations. (3) The power of the people to initiate and to veto laws. (4) A tariff high enough to protect home industry. (5) Electors chosen to elect a president.

2. Give the date of the adoption of the Constitution of the United States. How may it be amended?

2

1. In 1789. 2. An amendment may be proposed by a two-thirds vote of both houses of Congress, and becomes binding when ratified by the legislatures in three-fourths of the states.

3. What constitutes the legislative department of the United States? How is the membership of each house determined, how chosen, and what is the length of term?

3

A Senate and a House of Representatives. Each state is entitled to two senators chosen for six years. The number of representatives to which each state is entitled is determined by dividing the population by the ratio of representation. Representatives serve for two years.

4. How is a vacancy filled when occurring in each of the following offices: The presidency, United States senate.

4

1. The vice-president becomes the president. 2. If the legislature of the state is not in session the governor appoints a senator to serve until the next meeting of the legislature.

X

1. Define revenue; direct tax; indirect tax.

I

Government revenue is the income of the government. A direct

tax is levied directly upon property or polls. An indirect tax is assessed upon the property of one person, but is indirectly paid by another.

2. What is a "writ of habeas corpus"? Bill of attainder?

2

A writ of habeas corpus is an instrument in writing, directing the officers of the court to give a prisoner an immediate trial. A bill of attainder inflicts the death penalty without a trial.

3. The Supreme Court consists of how many justices? What is the length of their term of office?

3

(a) Nine. (b) For life.

4. What official rights have Congressmen?

4

Congressmen have the right to prepare bills, to vote on same, to serve on committees, and to render service to their constituents.

5. How are Senators elected? What is their term of office? How many in the Senate now?

5

(a) By the state legislatures. (b) Six years. (c) Ninety-six.

6. What representation have territories in Congress?

6

By delegates who have the right to speak, but not to vote.

7. What are the purposes of the Constitution?

7

In order to form a more perfect union, establish justice, insure domestic tranquility, provide for the common defense, promote the general welfare, and secure the blessings of liberty.

Answers to 1000 Pertinent Literary Queries

301-400

By Mary Eleanor Kramer

301. Frances Hodgson Burnett wrote "Little Lord Fauntleroy."
302. Anthony Hope wrote "The Prisoner of Zenda."
303. Charles Warren Stoddard wrote his first verses under the nom-deplume of "Pip Pepperpod."
304. Jack London lives in the famed "Valley of the Moon," Sonoma Co., Calif.
305. Edwin Markham wrote "The Man With the Hoe."
306. John Huir, when a boy, was so fond of reading that he used to arise early in the morning and go down in the cellar of his farm home, to keep warm, while he read his favorite books—Shakespeare, Milton, Burns and the Bible.
307. David Belasco began his famous career as playwright and producer, by carrying a spear in a production of Hamlet.
308. Edwin Markham began his life career by teaching school in Southern California where his schoolroom was "a spreading oak tree, his seats of logs."
309. Frank Norris began his career as a novelist while a freshman in the University of California.
310. Gertrude Atherton was born on Rincon Hill, San Francisco, Calif.
311. Kate Douglas Wiggin wrote her first book, "The Story of Patsey," to raise money for a kindergarten.
312. Poe Cottage is located on Kingsbridge Road, Fordham, N. W. Here Poe wrote "Annabel Lee"; "Ulalume"; "Eureka"; "The Bells"; "For Annie"; "The Cask of Amontillado," and "The Domain of Arnheim." Here the poet's beloved wife, Virginia Clemm Poe, died.

313. Greensboro, N. C., is noted as the birthplace of "O. Henry," William Sidney Porter.
314. At "Chapter Coffee House," Chatterton secured his famed suppers at a shilling each.
315. A. Conan Doyle wrote "The Hound of the Baskervilles."
316. "Doone Valley" is famous as the scene of the struggle between John Ridd and the sinister Carver, in Blackmore's "Lorna Doone."
317. Rudyard Kipling wrote "The Light That Failed."
318. In Dickens' "Little Dorritt," we learn of the famous "Bleeding Heart Yard."
319. The "Old Curiosity Shop" just off of Lincoln's Inn Field, London, was immortalized by Chas. Dickens, as the home of Little Nell and her grandfather.
320. Thomas Gray in his famous "Elegy Written in a Country Churchyard," said:
 "The pride of chivalry, the pomp of power,
 And all that beauty, all that wealth e'er gave,
 Await alike the inevitable hour,
 The paths of glory lead but to the grave."
321. Jerome K. Jerome wrote "Three Men in a Boat."
322. Sir Gilbert Parker wrote "The Right of Way."
323. Sir James Barrie wrote "A Window in Thrums."
324. In Rudyard Kipling's "Resessional," we read the following lines:
 "God of our fathers, known of old
 Lord of our far flung battle line
 Beneath whose awful hand we hold
 Dominion over pal mand pine,
 Lord God of Hosts, be with us yet
 Lest we forget, lest we forget."
325. On February 1st, 1616, Ben Jonson received the title of Poet Laureate and a pension of one hundred marks by Letters Patent and the Great Seal.
326. Alfred Tennyson held the title of Poet Laureate longer than any other poet, that is, from 1850-1892.
327. "Strand," located on the great lake called the Vetter Sea, in interior Sweden, is the home of Ellen Key.

328. "Tinkermom" was the home of Leigh Hunt.
329. Will Carleton was called the "Poet of the Natural Man."
330. Justin McCarthy wrote "Dear Lady Disdain."
331. James Lane Allen has immortalized in literature, the Blue Grass region of Kentucky. His best known work being "A Kentucky Cardinal."
332. Alphonse Daudet wrote "Sapho."
333. Of Will Carleton it was said: "He died, aged sixty years, young in the joy of living—almost juvenile in the earthly contentment he radiated."
334. William Morris said: "My work is the embodiment of dreams—to bring before men's eyes the image of the thing my heart is filled with."
335. Thomas Dixon, a native of Georgia, wrote "The Southerner."
336. To Amelia E. Barr was tendered by the literary people of New York, a famous dinner, known as "The Bow of Orange Ribbon" dinner.
337. William Dean Howells wrote "Their Silver Wedding Journey."
338. George Meredith wrote "Harry Richmond."
339. Lord Byron said:
"Chillon, thy dungeon is a holy place
And thy stone floor an altar."
340. Andrew Lang said: "No man selecting a literary harem could possibly leave out Jane Austen's heroines—'Anne Eliot' and 'Elizabeth Bennett.'"
341. Maxim Gorky wrote "Twenty-Six and One."
342. George Ade wrote "The Slim Princess."
343. Bulwer-Lytton wrote "The Last Days of Pompeii."
344. Whistler's residence known as the "White House" was located on Cheyne Walk, London.
345. Andrew Lang referred to Edgar Allan Poe as "A gentleman among canaille."
346. Du Maurier wrote "Peter Ibbetson."
347. Matilda Hoffman was the fiancée of Washington Irving. She died of consumption at the age of eighteen years. Irving, true to her memory, never married.
348. Jules Verne wrote "Michael Strogoff."
349. Rebecca Gratz, an American Jewess and close friend of Ma-

tilda Hoffman, was the prototype of "Rowena" in Sir Walter Scott's "Ivanhoe."

350. Clothilde Graves writes under the pen-name of Richard Dehan.
351. Beatrice Harraden wrote "Ships That Pass in the Night."
352. Frances Hodgson Burnett wrote "The Secret Garden."
353. George Eliot published her first book at thirty-six years of age, and in the next twenty years had earned \$150,000 by her pen.
354. George D. Maurier wrote his masterpiece "Trilby," when sixty years of age and almost blind.
355. M. Paul Fort is known as "The Prince of Poets of Paris."
356. "Otsego Hall" was James Fenimore Cooper's home at Cooperstown, N. Y.
357. William Cullen Bryant lived at Cummington in the Berkshire Hills.
358. The burial ground at Hunt's Point, New York, contained the grave of Rodman Drake, author of "The American Flag."
359. Thomas Lawson, author of "Friday, the Thirteenth," lives at "Dreamwold," a summer palace near Quincy, Mass.
360. Monticello was the home of Thomas Jefferson.
361. Wakefield, Harlem Road, New York, was the childhood home of Adalina Patti.
362. Robert Louis Stevenson was the renowned "R. L. S."
363. Jean Webster was the author of the "Patty" stories.
364. Kate Douglas Wiggin was the author of the "Rebecca" stories.
365. "Villa Crawford" was the Sorrento home of Marion Crawford.
366. Longfellow wrote "The Village Blacksmith."
367. Oliver Wendell Holmes wrote "Grandfather's Story of Bunker Hill Battle."
368. Alice Cary wrote "Pictures from Memory."
369. Washington Irving wrote "The Legend of Sleepy Hollow."
370. Frederick, Md., is noted as the burial place of Francis Scott Key, the author of "The Star Spangled Banner."
371. Westminster Churchyard, Baltimore, Md., is the burial place of Edgar Allan Poe.

372. Oliver Goldsmith in "The Deserted Village," said:
"Thus to relieve the wretched was his pride,
And e'en his failings leaned to virtue's side."
373. William Cowper in "Man's Inhumanity to Man," said:
"My ear is pained,
My soul is sick with every day's report
Of wrong or outrage with which earth is filled."
374. "The Canterbury Tales" are a collection of stories written at different times, but put together, probably, toward the close of Chaucer's life. A number of pilgrims who are going on horseback to the shrine of St. Thomas Becket, at Canterbury, meet at the Tabard Inn, in Southwark, a suburb of London. The jolly host of the Tabard, Harry Baily, proposes on their way to Canterbury each of the company shall tell two tales, and two more on the way back, and that the one who tells the best shall have a supper at the cost of the rest when they return to him. He, himself, accompanies them in the capacity of judge and "reporter."
375. Edmund Spencer's own marriage song, written to crown his series of "Amoratti" or love sonnets, was called Epithalamion, said to be the most splendid hymn of triumphant love in the English language.
376. Francis Bacon was called "The Father of Inductive Philosophy."
377. Dr. Samuel Johnson said "The wine of Bacon's writings is a dry wine."
378. Horace Walpole dwelt in a castle on famed Strawberry Hill, where he made a collection of ancient armour, illuminated manuscripts, and bric-a-brac of all kinds.
379. Of Hans Christian Andersen it was said: "His dominant trait was an insatiable ambition, to which he owed all the joys and all the sorrows of his life."
380. Roycroft Inn, at East Aurora, New York, is the home of Elbert Hubbard—"Fra") the author of the famous "Little Journeys."
381. Bret Harte wrote "The Heathen Chinees."
382. Jeffrey Farnol, has chosen Kent, England as the scene of his

- popular books, "The Broad Highway" and "The Amateur Gentleman."
383. Alfred Noyes wrote "Tales of the Mermaid Tavern."
384. Austin Strong, author of "The Exile," "The Little Father of the Wilderness," etc., is the step-grandson of Robert Louis Stevenson.
385. Hauteville House is famed as the home of Victor Hugo.
386. Thomas Carlyle said: "Great men taken up in any way are profitable company."
387. Robert Louis Stevenson when asked the day of his birth, responded by giving the date of his wedding.
388. Elbert Hubbard said: "We are all children in the kindergarten of God."
389. Arthur Schopenhauer has been called "The Great Apostle of Pessimism."
390. Vailima was the Samoan home of Robert Louis Stevenson.
391. Keilhau was the home of Froebel, the Kindergarten.
392. Henry David Thoreau has been termed "The Ideal Idealist."
393. Walt Whitman said: "I find letters from God dropped in the street, and every one is signed by God's name."
394. "Brook Farm" was an ideal community founded in Roxbury, Mass., by various New England writers, including Emerson, Hawthorne, Margaret Fuller and others. The central idea was to share everything, but the experiment proved a failure.
395. Margaret Fuller Ossoli, with her husband and child, perished off Fire Island, New York.
396. Nathaniel Hawthorne wrote "The Blithedale Romance."
397. Robert Burns wrote "Auld Lang Syne."
398. Henry David Thoreau lived in a little hut near Walden Pond, Concord, Mass. The spot is now marked by a cairn of stones, erected by tourists and admirers of the great naturalist.
399. Of William Wordsworth it has been said: "He was something of a Quaker in poetry, and loved the sober drabs and grays of life."
400. James Russel Lowell wrote "Biglow Papers."

Working the Dictionary

THE G. & C. Merriam Co. of Springfield, Mass., publishers of Webster's New International Dictionary, have published in pamphlet form lists of questions in Language, History, Geography, Biography, etc., with references to the pages of the dictionary where the answers may be found. The following are given as examples of the questions contained in the pamphlet. The compiler of the questions seems to have mastered the art of propounding questions of popular and pedagogical interest:

QUESTIONS ON SYNONYMS

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Behavior and conduct	204
Beg, beseech, entreat, implore	203
Impeccable and faultless	1078
Care, anxiety, solicitude, concern	332
Communicate and impart	451
Egoism and egotism	702
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Liberal and generous	1243
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Reprove, rebuke, reprimand	1810
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Useless, fruitless, ineffectual	2258
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MISCELLANEOUS QUESTIONS

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Who was Mr. Hosea Biglow	221
Who was Prince Fortinbras	856
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What is meant by Utopia	2260
What does <i>lusus naturæ</i> mean	1286
Which was the older when he died, Washington or Napoleon {	2495
	2543
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What is the difference between a Half and a Quarter Nelson (Illust)	973
What is a flat adverb	827
What is the present Morse code	1408
What was the Geneva Bible	901
What general was named Marshal Forward by his soldiers	1322
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Who were the Rosicrucians and why were they so called ...	1849
Who was Becky Sharp	1936
What is a Venetian galley like	885
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What is the committee of the whole	449

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Which is worth the most in the United States money, a franc, a lira, or a peseta	434
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Were the mound builders a distinct race	1412
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What is the missing link	1382
Who were the Janizaries	1156
What is hardpan	982
What was the Holy Grail	938
What is a xebec	2357
What is jujutsu	1171
How many pounds in a kilogram	2318
What is a werewolf	2321
Who were the samurai	1876
What was the Holy Alliance	1027
What is the origin of the R on a prescription	2548
What is a brain storm	267
What is modernism	1389
How is skat pronounced	1966
What is white coal	2329

Religion and the Public Schools

Creed and Curriculum

By William Charles O'Donnell, Jr.

Size, 12mo (4¾ x 7½ inches). Pages, 119.

Binding, cloth. Price, net, 75 cents, postpaid.

The problem is stated with gratifying clearness and brevity, the discussion is logical and the development is consistent. The final chapter—"Who Leads the Way?"—calls attention to the fact that the great educationalists of all ages have been equally eminent as religionists, and outlines a possible program for instruction in the religious fundamentals in our public school system. The theme is particularly timely, and for the welfare of the nation this book should be read by every one who has to do with the training of our young people.

ZION'S HERALD: Dr. O'Donnell discusses the following question: "Can the essentials of religious faith and practice be taught in the public schools of the United States?" He comes to an affirmative conclusion. "Religion as a central fact in history, as a means of greater happiness and of larger liberty, is the common platform of all believers, and there must be possible some method of teaching it in public schools without furnishing occasion for sectarian opposition." He leaves the subject with this query: "Who then will lead the way?" This, after all, is the great question. He believes that text-books can be utilized for this purpose that cover the following subjects: "1. Belief in an unseen God as a fact in human history. 2. Rational grounds for the acceptance of a belief in God. 3. Personal obligations and social benefits arising from this belief." In this outline he covers in a general way the ethical and religious considerations which should be at the foundation of character.

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Educational Foundations

VOL. XXV.

JUNE, 1914

No. 10

Educational Authors' Series

[Important articles on pedagogical subjects written by well-known authors of successful text books are to appear in Educational Foundations during the year 1914-1915. A noteworthy feature of the series will be the information to be furnished concerning the contributing authors themselves. Our readers will readily recognize the educational value of this information.—Ed.]

No. 1

Teaching Children to Read

By Joseph S. Taylor, Pd.D.*

District Superintendent of Schools, New York City.

The Law in the Mind.

THE LAW in the mind and the thought in the thing, determine the method." This proposition, quoted from William A. Jones, is the foundation stone of the science and art of teaching. In the abstract, the dictum has always been approved by educators. Quintilian, and Pestalozzi, and Froebel, and Locke, and Spencer, and Horace Mann, all proceeded on this assumption. Progress in pedagogy consists in a clearer and more adequate knowledge of what the "law in the mind" is. That is, the advancement of pure and applied psychology makes the constant restatement of the problems of teaching indispensable. Thirty years ago, my teachers in the Normal School taught me the principle enumerated above: "Method is based

* Author of "Principles and Methods of Teaching Reading," The Macmillan Company, N. Y., 1913.

on the nature of the mind and the nature of the subject." Then they taught me a lot of things about the "nature of the mind" that nobody believes in this year of grace. Consequently the methods based on this psychology have gone to the rubbish heap. I was taught to read by the A-B-C method and myself employed this method in my first school. It had the approval of the method teacher in the Normal. It is one more illustration of the saving fact that a child learns *in spite of any method*. This explains why purveyors of special devices like the "Grube method," the "Speer method," etc., are prone to delude themselves and able to fool other people. Children's minds are so plastic and their desire to know is so great that they somehow learn by nature's method, even though we do our best to substitute some other procedure.

The Complete Method.

Herbart taught us what is a method-whole. The steps of the recitation suggested by him and variously named by his followers, are essentially these four: *Preparation, presentation, formulation, application*. Condensing the first two, we have the epitome of method in the three divisions of the orthodox sermon: *Explication, implication, application*. Preparation and presentation, or explication, are the analytic process of dealing with concrete material. The formulation is the statement of the general principle discovered in the particular facts. The application is the use of this general truth by way of test, review, or drill. The explication is the wool on the sheep's back. That is the raw material out of which method is made. The implication is the same wool worked up into broad-cloth. It is a lot of potential coat. The application is the coat on your back. It is concrete and particular, like the first step; but it is very different from particular with which you started. At first it was raw wool; now it is a finished garment.

My book on "Principles and Methods of Teaching Reading" is an illustration of the complete method as taught by the Herbartians and illustrated by the history of modern science. The first two chapters—*The Psychology of Reading* and *The Physiology of Reading*—constitute the first step of the method-whole. It is the attempt to ascertain "the law of the mind." That is, we analyze reading to find out what it is as a mental process—what takes place in the mind

when a child is learning to read, and what takes place when reading has become automatic. Chapter IV undertakes to define the *Ends of Reading*; that is, it deals with the objective contents of reading and the ends set up by the teacher. Chapter III is the formulation of the method-whole. In twenty-two propositions it states the general principles deduced, from the analytic study of the child's mind in relation to the subject of reading. This is the broadcloth. All the rest of the book is the last step of the recitation; the application, the cutting up of the broadcloth into garments for the reading teacher.

Illustrations.

As an illustration of the first step of the method-whole, I shall quote, with the permission of the publishers, the following excerpt from the first chapter of "Principles and Methods of Teaching Reading":

"5. *Reading a Form of Association.*—When a child enters school he has already acquired the use of oral language. This means that he has associated with his concepts certain sounds which we call oral words, and certain muscular images of the vocal organs as these are employed in uttering words. These three things, the

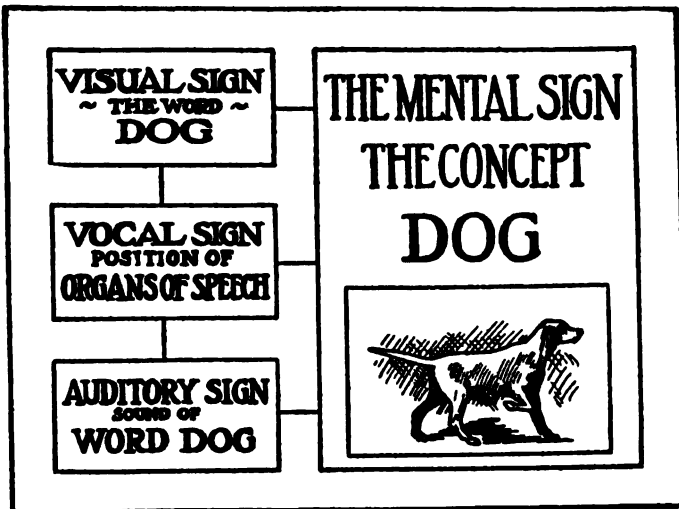


FIG. 1.

auditory image, the motor image, and the concept, are so indissolubly associated that any one is usually sufficient to call up the other two without conscious effort. Learning to read as a mental process is nothing more than the introduction of an additional factor into this group of associations in the form of a visual image, which we call the written or printed word. The four factors have been called the 'signs'¹ employed in reading. The accompanying diagram illustrates graphically the relation of these signs.

"Since reading is essentially a matter of association, we shall have to ascertain next what psychology has to tell us about that process. Association is an instance of the great law of nervous habit. Things repeated in the same order tend to unroll themselves again automatically, as, for instance, the nonsense rhymes used by children in counting off—

" '*Ana mana mona mike*
Barcelona bona strike.'²

"If you have been out in the deep snow, you know the difference between following the beaten path and making a new one. Nervous impulses have the same experience in getting themselves propagated through the central nervous system. They always tend to discharge themselves in the direction of least resistance; and this is the beaten path. Association is the psychological effect 'of the physical fact that nerve currents propagate themselves through those tracts of conduction which have been most in use.' If we think of the cause, we call the process habit; if we think of the effect, we call it association.

"The laws of association are sometimes distinguished to the number of three or four, but it is probable that all might be reduced to two—*contiguity* and *similarity*. If certain objects or events are experienced in the same place or at the same time, and one of the group is reproduced at a subsequent time, the rest of the group tend to reappear, also. In the same way, objects that *resemble* each other tend to reappear together, even though the two were never experienced together before. Referring to our reading diagram,

1. *Psychology in the Schoolroom*, Dexter and Garlick, Longmans, Green & Co., 1898, p. 126.

2. Many ideas and illustrations of association given here are borrowed from William James, *The Principles of Psychology*, Holt & Co., 1893, Vol. I, Chap. XIV.

we may say that if the visual sign, the vocal sign, the auditory sign, and the concept or image have been simultaneously in consciousness often enough, any one will be sufficient to recall the remaining three. Or, in other words, if the written word, the spoken word, and the heard word have been perfectly associated with the idea that they all express, the idea will recall all the modes of expression, and the three forms of the word will each recall the idea. 'A child who comes across a difficult word (*e. g.* hippopotamus) has merely a more or less imperfect visual sign. This does not call up any vocal (or motor) sign (he can not say the word); it does not call any auditory sign (he is unaware whether another scholar does or does not pronounce the word correctly). It is needless to say that no mental sign is called up (the word has no meaning to him). A child who can read a given word (*e. g.* emu), but does not know its meaning, is able to call up all the signs except the mental one. The whole art of reading aloud correctly and intelligently consists in being able to reproduce all these signs simultaneously.'¹ If we meet a familiar face on the street, or a familiar flower or bird in the field, but can not remember the name of the friend or object, then we have the mental sign, but lack all the others. In reading we look at words and endeavor to make out their meaning. In composition we have meaning and try to find words to embody it. The two processes are complimentary to each other. And in order to form deep and lasting associations between the words and their meaning, reading and writing should go hand in hand.

"6. *Laws of Association*.—Certain mental factors are important in determining the predominant elements of association and influencing the direction of the mental movement. These factors, which give rise to the various phases of association known as laws of similarity, contrast, etc., are as follows:

"(1) *Recency*.—Other things being equal, the experience that is most recent is likely to determine the course of mental movement. If I sit down in idle meditation after an exciting day's work or pleasure, my reverie is likely to be occupied with the scenes through which I have recently passed.

"(2) *Frequency*.—To the preceding factors must also be added

1. Dexter and Garlick, *op. cit.*, p. 126.

the frequency of connection between the presentations that are associated. If 'a' has been associated with 'b' twice and 'c' but once, other things being equal, 'a' is a better clew for the recall of 'b' than 'c' is.

"(3) *Vividness*.—The intensity of the first impression also is an important factor of the subsequent recall. This may depend on the nature of the stimulus, as a portentous sound, or my interest in the subject, or the emotion accompanying the impression. If you have ever witnessed a railroad accident, all accounts of such accidents will thereafter make a deep impression upon you. If you have ever visited the Palace of Versailles, any subsequent reference to Marie Antoinette will excite a lively interest. The art of creating vividness in teaching, therefore, would seem to consist in connecting your instruction with some significant experience of the pupil.

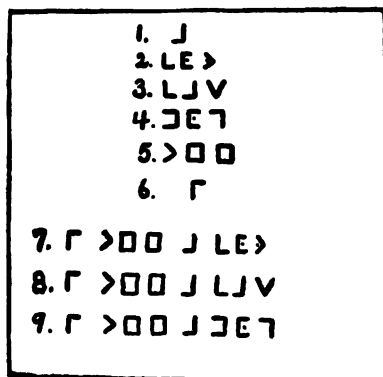
"(4) *Congruity*.—A fourth element is what James calls the congruity of the emotional tone of an impression and our mood. If you are in good spirits, a funny story makes a stronger impression upon you than it would if you were sad. If the mood and the emotion are of the same tone, they support each other. If they are opposite in character, they tend to annihilate each other. Thus, an interesting novel has small charms for a man who is seasick.

"(5) *Interest*.—That in which we are most interested makes the deepest impression on our minds and is most likely to abide. Just as in looking at a landscape certain features are picked out for attention, while others are ignored, so in recalling objects and events, there is an unconscious partiality in the selection of elements, which in time changes the object. This is why a great man seems greater after death than before. In recalling him after he is gone, we are prone to dwell on his good qualities and to forget his frailties. In the course of time our idea of the man is transformed. Washington is already a demigod; Lincoln is fast becoming one. While they lived they were vilified as much as any living public man of today.

"(6) *Voluntary Association*.—All the association thus far spoken of is involuntary. This is very important and all-potent with young children. But *thinking* may be defined as controlled or *voluntary association*. In reverie and in memory association takes

place in accordance with its own laws. In studying and thinking we make a conscious effort to vivify and intensify some one element above others, and in this way we determine the direction of the next associations. The skill of a teacher is shown by her ability to keep children in the control of their associations. When they lose this control, we say their minds wander, or they are not paying attention. They *are* paying attention, but not to the teacher. Their mental movement is revery, and they sit and inwardly gaze at a panorama of imagery. The associations control them. Their eyes and ears are wide open, but they see and hear nothing. When they control their mental movements, the associations follow the words of the teacher, and all else is suppressed.

"(7) *Illustration of the Process of Learning to Read.*—James defines reading, psychologically, as 'an interrupted and protracted recall of sounds by sights which have always been coupled with them in the past.'¹ This definition is incomplete, inasmuch as it leaves out two important elements of a complete process of reading—the motor image and the conceptual element. As a matter of fact, it describes a good deal of *so-called* reading, which consists simply in converting sight-symbols into sound-symbols, with little or no appreciation of the meaning of what is read. The pronunciation of a series of words in a foreign language of whose meaning one is wholly ignorant would satisfy every demand of the definition. The various elements of the complex experience for which a word

FIG. 2.¹

1. *Op. cit.*, p. 557.

stands may of course be excited in unequal degrees, but each element is sufficient ordinarily to excite all the rest in some degree.

"When one is simply glancing over a page in so-called silent reading, the vocal element seems to be missing, but experiment proves that it is quite impossible to suppress the motor images of words, and even the actual movements of the vocal cords. Children and uneducated persons usually pronounce all the words, even when they read for themselves alone; and in cases where muscular movements can not be detected by ordinary observation or by consciousness, their presence is revealed by delicate instruments. In fact, as a clue for revival, the motor element in the association of

¹ Following is a key to the characters used in Figs. 2 and 3:—

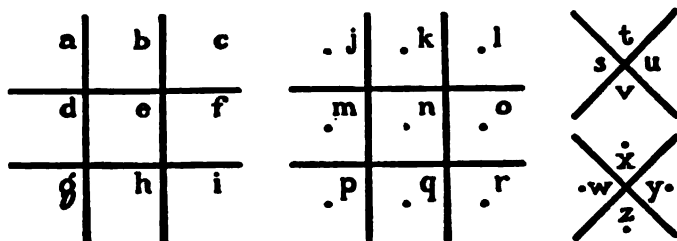


FIG. 4.

a word complex seems to me to be the most potent of all. This conclusion is confirmed by experiments on memory with and without motor images.



FIG. 3.

"In order to observe, if possible, what happens in the mind when one is learning to read, let us take the unfamiliar symbols in the diagram (Fig. 2). Suppose we say that no. 1 represents the word *a*, no. 2 represents the word *cow*, no. 3 represents *cat*, no. 4 is *dog*, no. 5 is *see*, no. 6 is *I*. Then see how much time and effort are required to read the sentences numbered 7, 8, 9. Make a similar experiment with Fig. 3. The oral words or auditory symbols are all familiar and thoroughly associated with the mental signs or meanings that they represent, and also with the motor images (vocal signs) of oral expression.

"What we have now to do is to introduce and incorporate these visual signs with the three other signs already established in our mental experience. The more manifold we make the clues that radiate from our new symbol, the greater will be the chance of recalling the group of which it forms a part. If we associate the visual sign with the vocal sign only, as, for instance, in learning to pronounce a foreign word of whose meaning we are ignorant, it would require a great many repetitions to insure its automatic recall. If we add to the vocal sign the mental sign, we increase the chances of recall by connecting more of our experience with the new symbol. If to the mental sign we add the actual presentation, as, for example, a real cow, or a model or a picture of a cow, the total experience is further enriched and deepened by interest and other emotions, all of which constitute clues of recall. By an appeal to a child's love of muscular and play activity, the experience may become still more significant. This could be done by having the word printed on a card and kept in a box with other words, then, on exhibiting an object or picture, calling upon the pupil to select the word that represents the object. Finally, one of the most powerful of clues is the muscular image of writing the words after it is known. It is evident, therefore, that whatever reading may be as a complete process, teaching a child to read is a good deal more than converting sights into sounds."

CONCERNING THE CONTRIBUTOR

THE CAREER of an educator is always of interest and value to other educators. In publishing our first article in the series to be written by successful authors we are able to give a fairly complete outline of the life of our contributor, Dr. Joseph S. Taylor. The sketch bears ample testimony to the fact that the subject thereof has been and still is a very active man. Dr. Taylor does not need any eulogium, from the editorial pen, but our belief is that he can be held up as a type of manhood which today constitutes one of the chief assets of our nation. It is, indeed, fortunate for us as a people that the teaching profession has drawn to itself so many energetic, big-brained men, willing to forego the more abundant opportunities for money making and preferment to be found in other callings, in order to devote themselves and their talents to the up-rearing of spiritual battlements which eventually become the safeguards of our civilization.

RECORD OF JOSEPH S. TAYLOR, PD.D.

1. **EDUCATION.**—Graduate of Millersville (Pa.) State Normal School; graduate of New York University with the degree of Ph.D.; two summer sessions at New York University in the study of biology; two summer sessions at Clark University in the study of education.

2. **EXPERIENCE.**—Three years a teacher of ungraded schools in Pennsylvania; one year a teacher of English in Junita College, Pennsylvania; four years an accountant and superintendent of a New York mercantile establishment; thirteen years a grade teacher in New York City public schools; five years the principal of a day elementary school in New York; eleven years a teacher in evening elementary and high schools; two years the principal of an elementary evening school; twelve years a district superintendent.

3. **LECTURER ON METHODS OF TEACHING AND SCHOOL ADMINISTRATION.**—At New York Normal College and Educational Alliance, two years; New York Teachers' Association, one year; Cliff Haven Assembly, two years; New York University, ten years.

4. **EDITOR.**—Edited "New York Teachers' Quarterly" one year

and "New York Teachers' Magazine" one year (the latter obtained a medal and diploma at the Paris International Exposition).

5. AUTHOR.—"Romance of Providence," being a history of the Church of the Strangers; "Art of Class Management and Discipline" (Barnes); "Composition in the Elementary School" (Barnes); "Word Study in the Elementary School" (Ed. Pub. Co.); "Graded Movement Writing for Beginners" (Co-author with Margaret M. Hughes), being a system of penmanship (World Book Co.); "Principles and Methods of Teaching Reading" (Macmillan); numerous magazine articles, *e. g.*: "Some Practical Aspects of Interest" (Pedagogical Seminary, Vol. 5, 1898); A Series of Articles on "Principles and Methods of Geography Teaching" (Educational Foundations, Vol. 19); A Series of Articles on "The Meaning and Method of History in the Elementary School" (Educational Foundations, Vol. 21); numerous articles in "School Work"; "Measurement of Educational Efficiency" (Educational Review, Nov., 1912); "A Quantitative Study of Reading" (Educational Review, Oct., 1911).

6. SERVICE AS DISTRICT SUPERINTENDENT.—Served six weeks in Richmond, one month in districts 2 and 3, four years in districts 14 and 18, eight years in districts 25 and 26, The Bronx. The last mentioned is one of the largest supervisory districts in the city, having a present registration of 48,000 children and a staff of 1,200 teachers. In eight years the registration of the district doubled. During this period he organized eight new schools. Have each year made a personal inspection and examination of every class in the district (as required by the Charter and By-Laws) and furnished each principal with a typewritten criticism of his school.

7. PROFESSIONAL SERVICE IN LOCAL TEACHERS' ASSOCIATIONS, ETC.—Was one of the organizers of the Male Teachers' Association of Manhattan and The Bronx; of the Evening School Teachers' Association of Manhattan and The Bronx; of the Society for the Study of Practical School Problems; and of the Principals' Club. Occupied various offices in each of the above, and edited the first pamphlet of the School Problem Society. For a number of years was chairman of the Committee on School Work of the Teachers' Association of Manhattan and The Bronx. This Committee, in 1901, made a printed report on the Course of Study, many

of whose recommendations were subsequently adopted by the Board of Education. Was Chairman of a Special Committee of the Male Principals' Association of Manhattan and The Bronx in 1901 to report on the Course of Study. The two Committees just named combined and made a joint report. Was Acting Chairman of a Committee on Uniform Grammatical Nomenclature appointed in 1912 by President O'Shea of the District Superintendents' Association. The report we submitted to the Board of Superintendents was the basis of the nomenclature adopted and now in use. Was instrumental in having a Committee appointed on the subject of grammatical nomenclature by the National Education Association, and printed an article on the subject in "Educational Review." Was Secretary of a Committee of District Superintendents, of which Dr. William L. Ettinger was Chairman, to review the Findings and Recommendations of Professor Frank M. McMurry and Professor Edward E. Elliott of the New York School Inquiry. This report, very carefully prepared by the Committee, and approved by the Association, is now in the hands of the Board of Education. Is at present Chairman of a Committee of District School Superintendents appointed by President O'Shea to devise a plan for giving credit for industrial homework.

8. MEMBER OF—National Education Association; National Society for the Scientific Study of Education; Society of Doctors of Pedagogy; New York State Teachers' Association; New York State Science Teachers' Association; National Society for the Promotion of Industrial Education; American Nature Study Society; National Geographic Society; American Association for the Advancement of Science, etc.

WE REGRET to learn of the death of Dr. James B. McFatrigh, one of the most popular and enterprising men in the City of Chicago. Dr. McFatrigh was for years the President of the Board of Education of Chicago, and was highly esteemed by all the teachers under his charge. He has been connected with many enterprises and was the founder of the widely-known and successful Murine Eye Remedy Co.

A Review of Representative Genetic Studies of Number

[Mr. Howell's articles on "A Review of Representative Genetic Studies of Number" are to constitute the opening chapters of his book on the same subject soon to be published by the Macmillan Company.]

By Henry B. Howell, Principal P. S. 27, Jersey City, N. J.

VI. Psychological Considerations

IN THE LIGHT of our biographical review, and the data regarding calculating procedure therein included, it is possible to get some clue to the psychology of the prodigy.

1. One fact stands out, I think, undeniably. The prodigy is a genius. Now the phenomenon, called genius, is ultimate in its nature and is its own explanation—one can not explain a *summum genus* further than to make it appear that it is a *summum genus* which places it outside the sphere of explanation. One can *describe* the conditions of its manifestations and give an account of its performances; one can answer the question, "how is the genius?"; but not, "why is the genius"?

At least four signs appear: (a) The tremendous interest of the prodigies in their work; (b) their unusual insight into the properties and relations of numbers, which leads to (c) their amazing performances; (d) their precocity.

(a) Their work is the result of interest, but the interest is the result of genius. They proceed with calculation because, as the saying is, they have a genius for it. True, in a sense, the interest is a result of the work because of the joy the endowed man takes in his work, illuminated as his pathway is by facets of light unperceived by the general; the two are reciprocal in their causative action, but interest is primary as between the two, and genius is elemental to both.

(b) Their insight into properties and relations come as flashes,

whereas in the case of the ordinary man they come but slowly or not at all. In a sense, too, it is acquired; all genius needs appropriate stimuli for its development and with practice, its field of operations becomes enlarged. But stimuli and practice might be present to you and to me with improving but certainly not astounding results. It is not meant that the knowledge of these properties is the result of mathematical insight. So far as it may be, it lacks the naivete and spontaneity that characterizes the devices of our born prodigies. Or, that the properties and relations are necessarily such as would be recognized as valuable by the mathematician. Yet the prodigies on occasion made discoveries of facts theretofore undiscovered or believed to be impossible by the mathematicians and it may be that some of their devices await, through proper study and formulation, assimilation into the theory of number.

(c) Their amazing performances and explaining only in part by their genius for numerical properties and relations; memory, as we have seen, plays a large part. Not such a memory as you and I have but a hypertrophied memory, a memory sublimated to such an extent as to amount to a supernormal activity in itself, and therefore, another phase of the genius of the operator. It must be remembered, however, that no faculty of figure memory, however prodigious, could, as such, produce a calculator. It is of importance in this connection only as it stands in the service of calculation genius, as such. Besides memory, we must add (to explain rapidity, when the calculation is a genius one), subconscious functioning. All of the steps do not appear in the focus of consciousness; some are slurred over, as in the case of Mitchell when computing the eighth power of 3. Results often come before the full consciousness of the numbers involved. Introspection of our ordinary process in the addition of a column of figures will serve to enable us to understand this in a measure. If we are at all expert, we simply glance up (or down) the column and name the several sums (or motorize them) scarcely being conscious of the figures added. While this power of subconscious functioning doubtless may be improved by practice in the ordinary individual, it is developed far beyond the ordinary in the arithmetical prodigy.

(d) Their precocity is a sign of genius. Precocity is not always a sign of genius, altho genius is often accompanied by

precocity. But, if we can determine on other grounds that the prodigies are geniuses, their precocity can be taken as confirmatory evidence. With scarcely an exception, the prodigies were precocious and the universality of this trait in them, and the constancy of its eventuation in actual achievement in their cases make us ready to accept their performances as instances of what Carpenter (*Mental Physiology*, page 231), in discussing prodigies, describes as "numerical intuition or congenital aptitude for recognizing the relations of numbers."

Mitchell says, "Precocity in calculation is natural and normal; popular amazement over it is groundless; there is no need even to regard it as remarkable. Owing to the origin of mental calculation in ordinary counting and the complete independence and self-sufficiency of mental arithmetic, mere mathematical precocity falls into a different class from musical precocity." To this we say that isolation of mental arithmetic and the untrammelled conditions under which it may go on may account for its free development, but can not account for its initiation. It may be admitted, too, that the precocity is natural, if by that is meant that it is not supernatural. But that it is normal we can not agree. Children do not do normally what the prodigies did as children; so that it is no wonder that the neighbors should be amazed at them. He says further, "Given a knowledge of how to count and later a few definitions any child of average ability can go on *once his interest is aroused* (italics mine) and construct unaided practically the whole science of arithmetic." This we grant, "once his interest is aroused." But we do not believe it possible to arouse his interest (in the degree here intimated) unless he has a "congenital aptitude" far above the average. That prodigies do have an aptitude which the average child has not, is shown by their very precocity. The precocity is the cause of his interest, not the effect of it.

2. It seems clear that the prodigy is of more than ordinary sharply defined mental type. An interesting comparison between P. Diamandi and J. Inaudi, bearing on this point, is given by Dr. Ioteyko in her article¹ previously referred to, based upon certain observations and studies by Prof. Manouvrier, Binet, and others. Diamandi is found to be of a pure visual-motor type, Inaudi of

1. Les Calculateurs prodigies in *La Revue Psychologique*, III, 1910.

pure auditive-motor. Their aptitudes are so one-sided that the two calculators are, as it were, the living embodiments of two types of memorization. To arrive at his results Inaudi must receive the problems to be solved in an auditive way. The assistants speak the figures. It is estimated that 300 is the number of figures which he engraves on his memory in this way at a single seance. The sight of the figures is of no service.

The opposite is the fact in the case of Diamandi. When problems are given to him through audition he appears embarrassed, hesitates, commits errors and asks that the figures be repeated to him many times. But when the figures are presented to him in writing, he memorizes large numbers rapidly and accurately. In his case figure-memory is but a phase of a general power; all the visual sphere appears well developed; colors, letters and written words are easily remembered, though his retentivity of these is weaker than of figures. The auditive memory of Inaudi, on the other hand, except with reference to figures, is much inferior to the normal. Mitchell's memory type is auditive-motor. He learned to count orally and his calculations began at once without further aid. He can not remember ever counting on his fingers or using pebbles or the like, and even when he learned to make written figures later on they never became associated with his mental calculations which remained strictly auditory (or auditive-motor) throughout. Ordinarily the motor element is almost entirely absent; when the calculations remain in familiar fields they are accompanied by no perceptible innervation of the muscles of speech. When he attempts unpracticed feats, however, the tendency to motorization is marked. Much the same thing was true of Safford. Compare this with Browne's subjects, who in unpracticed stages and in times of confusion or uncertainty, tended to reinstate the verbalism of the tables.¹ It would seem, at first sight, that the motor-minded person is at a distinct advantage because when his imagination or thought is at a low ebb he can "crank up" by means of his motor apparatus; however, this supposed advantage disappears when it is remembered that visualization itself when sharply analyzed is found to be largely made up of motor elements. Mitchell's type

1. C. E. Browne. *The Psychology of the Simple Arithmetical Processes*, *Amer. Jour. Psychol.*, XVII, 1906, 1-37.

is not so sharply defined as that of Diamandi, Inaudi, and others, but Mitchell is not a great calculator. His case approaches more nearly to that of the ordinary person, in that while one type of imagery (the auditory in his case), slightly predominates, and, so far in calculation is concerned is the prevailing type, he also makes use, with no special difficulty, of visual images in geometry and similar fields, and is, generally speaking, of the mixed type.

Mitchell has made a careful study of the psychological types of the prodigies, gathering up all the available evidence and finds that "many of the calculators, heretofore supposed to be of the visual type, turn out on closer examination to belong to the auditory or auditory-motor type, at least in calculation." Only two of the major prodigies (P. Diamandi and Bidder, Jr.), are certainly of the visual type, and both of these, as we have seen, belong to the class of "artificial" calculators. It is to be expected that the natural calculators should be of the auditory type. We have seen that our calculators usually begin as soon as they learn to count, in most cases before they can read and write. "Since counting is essentially a verbal process, the calculator who begins from counting before he learns to read and write, will usually belong to the auditory type and will make relatively little use of visual images in his actual calculations."

3. It would seem to go without saying that a more than usual power of attention is demanded by the feats of the calculators. "The attitude taken by calculators," says Dr. Ioteyko, "during mental work displays all the characteristics and signs of attention: eyes half closed, head bent, the figure expressing withdrawal and detachment from everything in the exterior world. Distractions coming from outside incommode them but little." The ability of some of them to carry on a running conversation or to go about other work or to carry on two calculations at once presents an anomaly of attention which must be explained by the fact that much of the work has been reduced to an unusual degree of automatism, unconscious cerebration or subconscious functioning, call it by what name we may. Unusual concentration, however, would still be needed to maintain a grip on the whole situation. Chronometric records of reaction-times show in both Inaudi and Diamandi great rapidity (half the ordinary in the case of Inaudi). While these rec-

ords may be taken as a measure of attention (the mind wanderer reacts slowly), and are so cited by Dr. Ioteyko, they may also be regarded as measures of the sensitivity and impressibility of the nervous system, and, therefore, of retentivity.

4. The memory factor has already been referred to under the discussion of the genius of prodigies; also its relation to the calculation psychosis. It is mentioned again in order to note that so far as it is a matter of relentivity, it is explicable by the experimentally determined impressibility just referred to. Again, the wonder of the feats of memory somewhat diminishes when it is known in some cases, and surmised in others, that what appears to be memory differs scarcely at all from perception since it is *the reproduction of a still persistent image*. Also, it is necessary to distinguish between genuine memory feats and quick, automatic calculations of which the results simulate memory. Bidder, Sr., it will be remembered, was for a time under the illusion that he possessed a multiplication table up to 100×100 . A calculator might, for example, be able with practice to multiply 48×64 so readily and rapidly by more or less automatic processes that he would get the answer (3072) as quickly as if he had relied on a direct act of memory; and if the process of calculation happened to be mainly or wholly automatic, he might even be ignorant of its existence and suppose he had actually found the result by direct and unaided memory. Disillusion would come, however, when under stress of fatigue or lack of practice his calculations become more conscious and brief flashes of the intermediate processes pass through his mind. The true nature of the psychosis is then revealed, not as memory but as calculation, for direct memory would not discover such intermediate links.

5. Does the psychology of the prodigy present any pathological aspects? There is room for suspicion that the superiority displayed in certain processes is due to a disequilibrium among the faculties, one center predominating to the detriment of others. This suspicion becomes certainty in two of the cases which we have reviewed (Buxton, Dase). The evidence is the lack of other interests, and even of ordinary general intelligence. Buxton's case was the more marked of the two in this respect, and it is hardly too much to say that he was a victim of arrested development, in

other words, a mental defective. He also showed the symptoms of arithmomania, since in listening to a sermon his whole occupation was to count the number of words, etc. One should not be surprised that the mental defective is capable of becoming a calculator of degree. He may be incapable of developing the number concept, abstract notion of number, but it would seem that computation can go on very well without such concept. Dr. H. H. Goddard¹ gives an account of an experiment conducted in the Vineland School, which tends to confirm this view. "Twelve of our most trainable boys were taken at the most trainable age and drilled on number. They were trained until they could cover a blackboard with figures and, drawing a line underneath, add up the total mass. Day after day and week after week they did this and gloried in their accomplishment. I need not tell you that they did not understand what they were doing." Some time later after this drill was stopped they could not tell the sum of 3 and 2. He also cites in the same article a number of cases of children who could perform the fundamental operations very well, but who could grasp and reproduce a simple dictation involving number notions with only slight success. But whatever may be true of the mental hygiene of Buxton and Dase, there is no evidence of lack of equilibrium or development in the other cases. These, with the possible exception of Fuller, all show average or superior intelligence, though in only two or three cases is the mathematical ability great. But we have already seen in our biographical review that mathematical and calculating ability are not correlated. Goddard's experiment throws some light on the reason why. Number, in the mathematical sense according to McLellan and Dewey,² is the abstract notion of the relation between concrete magnitudes. The rise of the number concept is the child's initiation into mathematics. But by dint of practice, calculation can go on moderately in children and prodigiously in persons specially gifted without blossoming into the apprehension of true number relations. Such apprehension is not needed but rather of properties and relations of figures, as such. Nor is whatever of mathematical theory may underlie such properties necessary.

1. See Supplement No. 1, The Training School No. 46, 1907, pp. 20-24. A side light on the development of the number concept.

2. McLellan and Dewey, *The Psychology of Numbers*, New York, 1898.

Pedagogical Applications.

We can enumerate some of the possible pedagogical applications only briefly:

1. The importance of having recourse in teaching children to the processes of memory peculiar to the individual may be inferred from the cases of Inaudi and Diamandi. The superiority of Diamandi would pass unperceived if one should propose to him problems in the auditive way; the opposite would be true for Inaudi.

2. Calculation *per se* is of importance. It can be cultivated. It would probably pay, therefore, to study the methods of prodigies to discover feasible short cuts now not much noted. An example is possibly the method of two-figure endings. Mitchell says, "they [two-figure endings] are, from a mathematical standpoint, trivial and of limited interest. To answer questions in evolution and factoring, the mathematician would turn to his tables of factors and roots or to a logarithm table; he would regard the properties of the mathematical prodigy's two-figure endings as unimportant special cases of more general propositions in the theory of numbers. They are, then, of merely curious interest in mental calculation. It is conceivable, of course, that if a new and comprehensive theory of their properties were worked out, it might find a subordinate place in the theory of numbers." It may be added that it might find a subordinate but somewhat valuable place, also, as a basis for arithmetical practice. Hail to the genius who will work out for us the arithmetic of two-figure endings.

3. Out of calculation *may* blossom the concept and the mathematical sense generally. Whether this will happen will depend, in part, upon the aims of the teacher and her skill in securing them. (Of course, it may happen in spite of her.) It is certain that nothing of the concept will emerge no matter what the practice and effort, until the time is ripe. As a child will not walk until his neuro-muscular apparatus for walking has reached a certain stage of growth and adjustment and the instinct for walking arises, so he will not resolve abstract number notions from concrete things until a proper degree of maturity arrives.

4. A lesson that the modern pedagogue hardly needs to be taught may be gathered from the fact that Fuller, Ampere, Bidder,

Mondeux, Buxton, Gauss, Whately, Colburn, and Safford learned numbers and their values before figures. Says Bidder (quoted by Scripture¹), "The reason for my obtaining the peculiar power of dealing with numbers may be attributed to the fact that I understood the value of numbers before I knew the symbolical figures. In consequence numbers have always had a significance and a meaning to me very different to that which figures convey to children in general."

1. Arithmetical Prodigies, *Amer. Jour. of Psychology.*, IV, 1891, pp. 1-59.

A Few Notes to Notice

1. Educational Foundations completes twenty-five years of continuous publication with this number.
2. The twenty-sixth year, beginning with the September number, will be one of improvement and progress.
3. The subscription price will remain \$1.25.
4. Reading Circles and Teachers' Clubs may arrange for special terms.
5. The publishers would like to locate "ye oldest subscriber." For how many consecutive years have *you* taken Educational Foundations?

Saint Paul, Minnesota

N E. A. Convention, July 4-11

SAIN'T PAUL, where the National Education Association Convention will be held July 4 to 11, is picturesque and imposing and provides unusual summer pleasures. The marvelous civic views which may be gained from the hills on which the city stands, from the dome of the magnificent new State Capitol, from the splendid high-set cathedral, from the skyscrapers on the business plateau at the base of the hills, compare favorably with those of Constantinople or Edinburgh. The city's aspect suggests the older cities of the East, both in the interesting irregularity of certain of its business streets, the modernity of its great public and business buildings and the beauty of its parks. But most attractive to the summer visitor are the three rivers and thirty lakes in and near the city. There are innumerable delightful places to go, and the trips may be made conveniently and at small expense.

Many cities have convention halls of sufficient size and enough beds and food for all comers. The question, therefore, that is uppermost in the minds of convention people is: "Where can we have also a good time and be comfortable?" Business first, of course; but pleasure runs a close second.

Saint Paul's convention facilities are abundant, there being in the central district excellent halls of all sizes that can seat some 29,000 delegates at one time—10,000 of them in a single room, one of the most wonderful auditoriums on the continent. This auditorium is owned by the city. The hotel and railroad facilities are adequate and unusually convenient.

The really distinctive feature, however, is that in Saint Paul and its immediate vicinity there are so many beautiful rivers and lakes where visitors may fish, row, paddle, motorboat, sail, bathe, steamboat, camp or picnic. Several of these nearby lakes have dancing pavilions and band concerts.

Moreover, Saint Paul is the center of a veritable "Lakeland,"

Minnesota having 10,000 lakes and Western Wisconsin, conveniently reached from Saint Paul, 5,000. A few hours' ride from the city takes one into Minnesota's famous pine forests.

The visitor to a city likes first to get the "lay of the land." Remarkable views may be obtained from the upper stories of the skyscrapers, including the roof garden of The Saint Paul Hotel, where the National Education Association Headquarters will be.

Among the first places of interest is, of course, the magnificent capitol building, built at a cost of \$4,500,000, on an eminence 200 feet above the Mississippi. It contains, besides marvelously beautiful pillars, staircases and rotunda, many statues and paintings by America's most famous sculptors and artists. Guides take visitors through the building without charge.

Saint Paul's municipal auditorium, one of the most remarkable buildings of its kind in the world, is but two blocks from The Saint Paul Hotel. In the upper stories of the auditorium are the Saint Paul Institute's public art gallery and scientific museum. Both are open to visitors without charge.

The magnificent Cathedral of the Roman Catholic church, one of the finest ecclesiastical buildings in America, now nearing completion, is on one of Saint Paul's hills and faces the famous Summit Avenue.

Another extremely interesting place in summer is Harriet Island in the Mississippi River, only about six blocks from the hotel. There the city has established excellent facilities for public baths, and thousands of people use them every week in summer. On the island also are the zoological gardens and public play grounds.

Como Park in Saint Paul is the largest cultivated park in the northwest; it has few equals among the parks in America and some beautiful features found nowhere else. Free band concerts are given there every summer evening and Sunday afternoon.

Phalen Park is an aquatic and forest park, has fine boating, and a canal, connecting Phalen and Gervais Lakes, and has been developed into a beautiful Venetian waterway.

Indian Mounds Park, next perhaps to Como, is the best known park in the Northwest. The mounds—ancient burial places of the Indians—rise in some instances to a height of 200 feet, and, filled with curious relics, are of unusual interest. The view from the park

commanding far-reaching prospects of the hill-bound valleys of the Mississippi and Minnesota Rivers, is hardly equalled in America.

Beautiful well-kept boulevards around the lakes, through the parks and along the river, make driving and motoring in Saint Paul peculiarly delightful.

And all around the city are interesting places well worth visiting. Fort Snelling—the oldest government military post in the Northwest—is picturesquely set on bluffs just across the Mississippi from the city. A few minutes' ride by trolley from Fort Snelling takes the visitor to Minnehaha Falls, perhaps the best known waterfall in America, excepting Niagara.

Immediately beyond Fort Snelling is the Minnesota River, famous for its scenic beauties and camping places for miles upstream from its juncture with the Mississippi and exceedingly popular with canoeists. Visitors may obtain canoes near the Fort at a small rental.

Twelve miles from Saint Paul is Wildwood amusement park, on the shore of beautiful White Bear Lake—a trip through rural scenes whose beauty is a constant delight. There is a fine bathing beach at the park. The trolley runs also to Stillwater, sixty-five minutes from Saint Paul, where visitors may inspect the new Minnesota State Penitentiary, whose architecture and equipment make it famous among all penal institutions in the world. From Stillwater the trip back to Saint Paul may be made by steamboat down Lake St. Croix and up the Mississippi.

Many visitors to conventions in Saint Paul take the Mississippi River trip to or from the city, the journey being through the most marvelous river scenery in America, the Hudson not excepted.

There is one other thing that is especially interesting to Saint Paul visitors, and that is that all of the city water comes from clean, pure, spring-fed lakes and artesian wells, and is drunk from the faucets without filtration. This exceptionally pure city water has had much to do with Saint Paul's record of the most healthful city of its size east of the Rockies. Typhoid and similar diseases exist to a far less extent in Saint Paul than in other cities of approximately the same size, and Health Department records show that many of the cases of typhoid come from country districts outside of the city and that not a single case has been traceable to the city water or milk supply.

A Change of Presidents and Important Promotions in the American Book Company

AT THE annual meeting of the Directors of the American Book Company, Mr. H. T. Ambrose announced his desire to retire from the presidency of the company, but expressed his willingness to serve as Chairman of the Board of Directors.

Mr. Ambrose's resignation was accepted with regret, and the Board promptly availed itself of his services as Chairman. He will continue to take a lively interest in the business welfare of the company, and will preside at its Board meetings.

Mr. Ambrose was a member of the firm of Van Antwerp, Bragg & Company, one of the predecessors of the American Book Company; and when the latter corporation was formed, he became its first Treasurer. He was elected President in 1895 and has served with conspicuous ability and success down to the present time. The company under his administration has been at all times prosperous, and its financial standing has been a synonym for soundness and stability. He has large interests outside the company, and has very recently purchased extensive orange and grape fruit groves in Florida, where he will spend a part of his time.

Mr. Ambrose is succeeded as President by Mr. L. M. Dillman, of Chicago, who has been Managing Director of the company at that point for some years past.

Mr. A. V. Barnes continues as Vice-President, and Mr. C. P. Batt as Treasurer; Mr. John Arthur Greene has been elected Secretary and Chief of the Agency Department to succeed the late Colonel Tucker.

The promotion of Mr. Greene and of Mr. Dillman has resulted in important changes of organization in the New York and Chicago offices. Mr. J. R. Fairchild has been made Manager at New York, and Mr. Leonard E. Reibold and Mr. Ralph S. Foss, Assistant Managers. Mr. Louis B. Lee has been made Manager at Chicago, and Mr. James C. Dockrill, Assistant Manager.

Mr. W. B. Thalheimer resigned as Managing Director at Cincinnati, and was elected Chief of the Manufacturing Department. Mr. Frank R. Ellis was elected Managing Director at Cincinnati, with Mr. W. T. H. Howe as Assistant Manager.

Literary Snap-Shots

By Mary Eleanor Kramer

Cy Warman, the "Poet of the Rockies," died in Chicago, April 7th. Warman was the pioneer in the "railroad" school of literature. He was born near Greenup, Ill., 1855, on a homestead which was presented to his father by the government for gallant service in the Mexican war.

Warman had a diversified career, having been in turn locomotive fireman, engineer, publisher and writer. He published the Western Railway in Denver. In 1892 he established the Daily Chronicle at the booming camp of Creede. Both publications failed. After becoming a reporter on a Denver, Colo., paper, Warman married Miss Marie Myrtle Jones, who had been educated in a convent in London, Ontario. When they were abroad three years later, Warman wrote the poem "Sweet Marie," which made him famous. He always gave his wife credit for the inspiration.

The last poem written by Warman, two weeks before his death, is entitled, "Will the Lights Be White," the concluding lines of which were:

Swift toward life's terminal I trend;
The run seems short tonight;
God only knows what's at the end—
I hope the lights are white.

One day, when feeling downhearted, Warman wrote the following beautiful lines:

"But there's a consolation
In the thought that when we're dead,
If we have written something good
Our efforts will be read.
And friends will plant forget-me-nots
And come and sit and sigh,
And irrigate our grave with tears
When we go off and die."

The burial was in London, Ontario.

A Son of the Ages: In this remarkable volume, Mr. Stanley Waterloo has told of the childhood of the race—has given to us a glimpse of primitive man that is crammed full of new thoughts and answers to old puzzling questions. No reader will forget the awe-inspiring picture he draws of the flood and the way it came.

The book reminds one of Jack London's "Before Adam," and yet it is unlike London's masterpiece. Has it ever struck you that man did not always know how to make a fire? What made it possible for him to bend his thumb over upon the palm and thus do the thing we need to do a thousand times a day—grasp the objects about us? These and many more great questions are met, and answered in a plausible manner in this book.—(*A Son of the Ages.* By Stanley Waterloo. Doubleday Page & Co.)

* * * * *

Ariadne of Allan Water: All lovers of clean fiction will welcome this new volume by Sidney McCall, the author of "Truth Dexter." The heroine like "Truth Dexter" is a sweet, unaffected, Southern girl, who dwells at "Allan Water," the ancestral Virginia home. She finds herself placed in a very difficult position, the result of her father's unwise will and the step-mother's subsequent marriage to an adventurer. But throughout her career of trial, she retains that sweet simplicity which endears her to the heart of the reader. The story opens in Virginia, but later the scenes shift to New York, The Hague and London.—(*"Ariadne of Allan Water."* By Sidney McCall. Little, Brown & Co.)

* * * * *

The Foothills of Parnassus: This book contains a fund of John Kendrick Bangs' habitual humor, also much that is serious. He defines the spirit of poesy in a selection called "Between Fact and Fancy." He says "I wonder where, deep-hid from mortal eyes, the fine-spun line 'twixt fact and fancy lies." "Profit and Loss," a poem that estimates the values of life and ends with just "gratitude for having lived at all," will delight all lovers of thoughtful verse.—(*The Foothills of Parnassus.* By John Kendrick Bangs. The Macmillan Co.)

Fairy Tales: Pro and Con: The function of the fairy tale in developing the young reader's imagination is highly esteemed by some educators, and as severely condemned by others; and the reasons for each of these opposing judgments are obvious. Prof. William A. Neilson, of Harvard, at a recent meeting of mothers gave his opinion of the Grimm tales and similar juvenile works. "The stories by the brothers Grimm," he said, "were written many years ago, and perhaps the most charitable way of dismissing them would be to say that for their time they were all right. The fact remains, however, that they are standard and classic, and that there is still a profitable business in publishing them. Sooner or later they fall into the hands of our little folk. I believe that these stories should be discarded because their suggestion to the childish mind is that every wrong was avenged. Revenge is a bad enough vice to exist in any of us, without being suggested and inlaid in the childish mind by a fairy tale." True, in part. In an ideal world, with an ideal system of education, the child would be taught to turn the other cheek; but in an ideal world there would be no cheek-smiting to begin with. In the actual world the situation is more complex. In the actual world, too, it is very improbable that any child not an imbecile ever takes the Grimm tales literally. When Hansel and Grethel shove the wicked witch into the oven, shut the door, and run away to leave her to her merited cremation, the young reader takes a wholesome pleasure in this vivid illustration of poetic justice, without incurring any serious risk of imitating Hansel and Grethel's example. At any rate, if our little folk are to have nothing given them to read more highly-spiced than "Stanford and Merton" and the "Rhollo" books, they will never develop much love for literature.—The Dial.

* * * * *

The linnet is tuning her flute,
The bees are beginning to swarm,
And the music of blossom and root
Is throbbing and joyful and warm.
I am part of the lyrical strife,
I am one with the voices that sing—
While even the stones feel a hunger for life,
In the urge and the clamor of Spring!—

Louis Untermeyer (from "First Love").

With Walt Whitman in Camden: For nineteen years, Mr. Traubel was most intimately associated with Walt Whitman in Camden. During the greater part of this period he saw the poet daily, often several times a day. In 1888, he began to record, consecutively and faithfully, the conversations and events of each meeting, whatever the subject-matter, whether important or seemingly trivial; and this diary record was continued until the poet's death in 1892. From time to time Whitman handed to Mr. Traubel letters and other material. Concerning this Mr. Traubel says in his introduction: "Did Whitman know I was keeping such a record? No, yet he knew I would write of our experiences together. Every now and then he charged me with immortal commissions. He would say: 'I want you to speak for me when I am dead.' On several occasions I read him my reports. They were very satisfactory. 'You do the thing just as I would wish it done.' . . . This book is more than my book. It talks his words. It reflects his manner. It is the utterance of his faith."

In preparing the diary for publication Mr. Traubel has made no attempt to dress up Whitman or in any way to obtrude the personality of the chronicler. The text shows how faithfully he has obeyed Whitman's injunction—"Be sure to write about me honest: whatever you do do not prettify me." In addition to several letters and manuscripts reproduced in facsimile the book contains letters (most of which are now published for the first time) from Tennyson, Lord Houghton, John Addington Symonds, William M. Rossetti, Robert Buchanan, John Morley, Ellen Terry, Roden Noel, Edmund Gosse, Edward Carpenter, Edward Dowden, Sidney Lanier, Bret Harte, Joaquin Miller, John Hay, Edwin Booth, John Burroughs, William Douglas O'Connor and others.—(With Walt Whitman in Camden. Complete in eight volumes. By Horace Traubel. Mitchell Kennerley.)

* * * * *

Ten Sex Talks to Girls, Fourteen Years and Older: "Forewarned is forearmed," is the motto adapted for this thoroughly good book. Its mission is delicately performed, with a good man's reverence for lofty and true womanhood. The doctor will find it

invaluable when called upon to instruct his young patient in proper protection of her health; the mother and the teacher can find no better means to employ for the instruction of the young girl in what it is vitally necessary that she should know.—(Ten Sex Talks With Girls, Fourteen Years and Older. By Dr. I. D. Steinhardt. J. B. Lippincott Co.)

* * * * *

The Teachers' Story Teller's Book: "Eager-eyed children begging teacher to tell them a story; teacher vainly trying to remember something suitable to still their story-hunger—you know the distressing situation? Children tired of work and growing restless—can you send them back to their studies with renewed interest by a lively story? Every primary teacher who has struggled with these difficulties will find in *The Teachers' Story Teller's Book*, by Alice O'Gray and Frances Throop, a constant boon.

The opening selections in the book are "just a minute" stories; the later selections gradually lengthen as the child's power of attention is developed. Lively imagination and rollicking fun hold a prominent place, and the authors believe thoroughly in the value of verse in story telling.

Miss O'Grady, as the head of the kindergarten department in the Chicago Teachers' College, and Miss Throop, with her valuable experience as a teacher in the Pickard School, are unusually well qualified to select such material, and the well-considered suggestions offered by these authors will help the teacher greatly to succeed in the most intimate of teaching arts.—(*The Teachers' Story Tellers' Book*. By Alice O'Grady and Frances Throop. Rand, McNally Co.)

* * * * *

The Fairy Minstrel of Glenmalur: This is a beautiful book of fairy tales for children of all ages, and its illustrations and cover design are in keeping with the contents. It is a fit companion for Mr. Leamy's "Golden Spears and Other Fairy Tales," which has been pronounced the most winsome and educative of its kind. Both combine the purest of literary grace with a simplicity of nar-

rative and a compelling interest that draw the youngest and the oldest to the last word of the story.—(The Fairy Minstrel of Glenmalure. By Edmund Leamy. Desmond Fitzgerald.)

* * * * *

Charles G. Norris, brother of Frank Norris, and husband of Kathleen Norris, humorously protests that most of his time is spent in answering questions about the two authors with whom he is so closely connected. Mr. Norris himself is connected with the art side of the publishing world. The publication of "*Vandover and the Brute*" (Doubleday Page & Co.), has revived a number of interesting stories about Frank Norris.

Charles Norris was telling about the annual Frank Norris dinner which is held by the Phi Gamma Delta fraternity. It originated in the "Pig Dinner" held every Class Day by the University of California Chapter. This began in rather amusing fashion. Apparently every class day at the University of California occurs a ceremony known as the "Dispensation," at which the "Dispensator" makes presentations to the members of the class and others. One of these while Norris was an undergraduate was a live pig given to a rival fraternity—the D. K. E. The pig escaped—Frank Norris pursued it, caught it and returned it in triumph to the Phi Gamma Delta Clubhouse. Here it was fattened. A festal day was set apart, a procession was organized, the Dead March played, and the Pig Dinner ensued. The "Pig Dinner" became annual at the University; and after Frank Norris's death was taken up by the fraternity as a whole. It is still observed as the annual Frank Norris Dinner.

* * * * *

RICH ENOUGH

How weak, how poor, dear, to your door came I!
But now how strong to face the world's rebuff,
How rich in all mere gold can never buy!
Who holds one woman's heart is rich enough!—

Stokely S. Fisher in the "International."

* * * * *

Shakespeare's Birthday (April 23d) was appropriately cele-

brated in Chicago, by a party of actors, dramatic critics, and representatives of literary societies, who gathered around the bard's statue in Lincoln Park and paid tribute with flowers and speeches. Wreaths from all parts of the world were laid on the statue: In some cases the flowers had actually been sent from long distances, in others the donors had directed floral tributes to be made in Chicago. Walker Whiteside sent greetings from the Comedy Theater, London, England. His message was frequently used. It was quoted from "The Merchant of Venice" and read: "From the four corners of the earth they come to kiss thy shrine." Other of the contributors were David Warfield, Otis Skinner, William Feversham, The Ben Greet players, and Laurette Taylor.

Interesting Topics in May Magazines

Scribner's: A Hunter-Naturalist in the Brazilian Wilderness (second article), by Theodore Roosevelt. Tripoli (North Africa and the Desert), by G. E. Woodberry. The Light Cavalry of the Seas, by D. Pratt-Mannix. Munnern, by Georgia Wood Pangborn. A New Field for Mountaineering, by Elizabeth Parker. A Gentlemen of the Old School—Some Reminiscences of Charles King, by Gertrude King Schuyler. Some Recent Small Sculptures, by William Walton.

Everybody's: Putting Across the Federal League, by Joe Tinker. The High Price of Speculation, by Garet Garrett. Better Business by William Hurd. The Trouble with Ulster, with foreword by Joseph Edgar Chamberlain, by G. K. Chesterton. Let's Pretend, by Virginia Roderick. Dead in the Steerage (verse), by Nancy Byrd Turner.

The International: Harry Thurston Peck (verse), by Joel Elias Spingran. The Faith of the Fathers, by George Brandes. The Tannebaum Case, by Mabel Dodge. Actresses and the Vote, by Israel Zangwell. The Art of Paul Helleu, by Blanche Shoemaker Wagstaff. The Exeter Road (verse), by Amy Lowell. The Wood Anemone, by Madison Cawein. Diabolistic Idealists, by Benjamin De Casseres. Amende, by John Nicholas Beffel. Etched in the City, by Edward Heyman Pfeiffer.

McClure's: Clean Living and Quick Thinking, by Connie Mack. Across the Atlantic by Air, by Cleveland Moffatt. A \$100,000 Imagination, the Story of Theodore N. Vail, by Edward Mott Wooley. My Autobiography, S. S. McClure.

Cosmopolitan: Walter Crane-Master Decorator, by Gardner Teall. The Wartime Story of General Pickett, by Mrs. Gen. George E. Pickett. Progress and Politics: Shall England Dictate Our Panama Canal Policy?

Mother's Magazine: Making the Story-Hour National, by Richard Arnold. Developing the Child's Individuality, by Anna Guilbert Mahon. Teaching Your Child That the Farm is Worth While, by James J. Hill. Reading or Writing First—Which, by Jenny B. Merrill. The First Great Women's Primary, by H. F. Cable. A Parent-Teacher Circle, by L. A. Banks. On Mother's Day (verse), by Owen O'Neill.

American: Abe Martin on Spring Fever, by Kin Hubbard. The Auto Game in Homeburg, by George Fitch. They Who Knock at Our Gates, by Mary Antin. Seeing America—A Thinker in the White House, by Ray Stannard Baker. Experiences of an Airman, by Augustus Post. B. F. Keith, the Greatest Vaudeville Manager in the World, by Robert Grau. The Lure of the Bleachers (a story), by Hugh S. Fullerton.

1000 Pertinent Literary Queries

401-500

By Mary Eleanor Kramer

401. When and by whom was the following prayer written:
"When the day returns, return to us our sun and comforter, and call us up with morning faces and with morning hearts—eager to labor—eager to be happy, if happiness shall be our portion—and, if the day shall be marked for sorrow, strong to endure it."
402. Of whom did Channing say: "Give him sunshine and a handful of nuts and he has enough"?
403. Who said: "The sound of a kiss is not so long as that of a cannon, but its echo lasts a deal longer"?
404. Who wrote "The Greatest Thing in the World"?
405. Name three literary diplomats, now serving (1914) the United States in foreign courts.
406. Who has been termed "The Boswell of the Old-Time Negro"?
407. Who said: "Nothing can be beautiful which is not true"?
408. Who is the present (1914) Poet-Laureate of England?
409. Who wrote: "Out of the Park"?
410. Who said: "Defer not till tomorrow to be wise. Tomorrow's sun for thee may never rise"?
411. What American poet is the author of a poem which has netted him more than \$500 a word?
412. Of what American novelist has it been said: "The mantle of Miss Alcott has descended upon her"?
413. Whose poem "Manhattan" brought him fame?
414. Who said: "I awoke in the morning and found myself famous"?
415. Who was "Octave Thanet"?
416. Who wrote "Cranford"?
417. For what is "Sunnycrest" noted?

418. Who wrote:
 "Hail, holy light
 Offspring of heaven, first born"?
419. What noted divine sold a slave from the pulpit of Plymouth Church, Brooklyn, New York?
420. Who said: "All the people can not be fooled all the time"?
421. What and where was the "Old Corner Book-Store"?
422. What author is said to have instilled in Augustus St. Gaudens his first taste of real literature?
423. Of whom has it been said: "In his books he will live through the ages"?
424. Who wrote: "Hugh Wynne, Quaker"?
425. Who said:
 "Hearts, like apples, are hard and sour,
 Till crushed by pain's relentless power"?
426. Who said:
 "And when you think of this, remember, too,
 'Tis always morning somewhere, and above
 The awakening continents, from shore to shore,
 Somewhere the birds are singing evermore."
427. Where do we find the following literary folk: Helena Richie, Margaret Paget, Anna Leath, Calliope Marsh, George Bal-
 lew, Tiny Tim, Pomona?
428. Who wrote "The Iron Woman"?
429. What was "Old Trail Town"?
430. Who wrote "Dawn O'Hara"?
431. Who wrote "The Wood Carver o' Lympus"?
432. Who said: "There's some fellers go to the devil just because
 they ain't got nowhere's else to go"?
433. Who is "Abe Martin"?
434. Of what poet is it said: "In his verse one gets Kentucky atmo-
 sphere; the ripeness, mellowness and sweetness of bird song
 and beauty of foliage which are characteristic of the Blue
 Grass country"?
435. What Canadian (by birth) poet is a relative of Ralph Waldo Emerson?
436. Who wrote "The Nine-Tenths"?
437. What noted American woman of letters was born at Bowling Green, N. Y.?

438. What three prominent Boston writers were called "Boston's Greatest Trinity"?
439. Who wrote "In the Morning Glow"?
440. Who wrote "The Long Roll"?
441. Who said: "What I must do is all that really concerns me—not what people think"?
442. Where and what was "Green Peace"?
443. Who was the founder of the now famous "Boys Howe Club"?
444. Who wrote the poem "A Visit From St. Nicholas"?
445. What and where is "Quillcote"?
446. What and where is "Hull House"?
447. Who wrote "Twenty Years at Hull House"?
448. Where do we hear of "Bracebridge Hall"?
449. Who wrote "Christmas as it Used To Be"?
450. Who was called "The Poet of the Present and the Actual"?
451. Who was the first woman to be elected president of the National Education Association of the United States?
452. Who wrote the popular song: "Rock Me To Sleep, Mother"?
453. What city was the original "Old Chester" of Margaret Deland's romances?
454. Who wrote "The Old Peabody Pew"?
455. Who is said to have been the prototype of Mrs. Deland's famous "Dr. Lavender"?
456. Who wrote:
"It is easy enough to be pleasant—
When life flows on like a song;
But the man worth while
Is the man who can smile,
When everything goes dead wrong"?
457. What American novelist has won for herself the title of "The Historian of the South"?
458. Who has immortalized "The Limberlost"?
459. What American novelist speaking of his marriage said: "I have mated with the spring—I have married the May"?
460. Who said: "To give people what they do not earn is to make them think less of themselves—and you. The only way to help people is to give them a chance to help themselves"?
461. Who said: "Genius is essentially feminine"?
462. Who wrote "The Old Oaken Bucket"?

463. Who was the first American to adopt literature as a profession?
464. What writer wrote under the nom-de-plume of "Selim"?
465. What and where was "The Friendly Club"?
466. What and where was "The City Hotel"?
467. Who wrote "Marco Bozzaris"?
468. Who was called "The Mad Poet"?
469. What writer spoke of New York city as a "mast-hemmed Manhattan"?
470. Who was called "The Poet of Celestial Passion"?
471. Who wrote "Sweet Bells Out of Tune"?
472. Who were the founders of the original "Author's Club" of New York City?
473. For what are "St. Alban's Apartments," New York City, notable?
474. Who wrote a "Romance of Old New York"?
475. What and where is "Minniesland"?
476. Who wrote "Bitter Sweet"?
477. Who was called "The American Sibyl"?
478. Who was called the "Impassioned Ariel of English Verse"?
479. Who is "Marion Harland"?
480. Whose home was called "The Cedars"?
481. Who made famous "Rudder Grange"?
482. What poet in memory of his mother, wrote the poem entitled: "As Thy Portals, Also Death"?
483. What and where is "Pigeon-Roost-in-the-Woods"?
484. What writer named his dwelling "The Holt"?
485. Who was the prototype of Walt Whitman's "good, faithful Jersey woman"?
486. What and where is "Cherry Croft"?
487. What American poet, in 1876, was called upon to write the "National Ode," for the Centennial Fourth of July celebration, in Philadelphia?
488. Who wrote "A Rill from the Town Pump"?
489. Who wrote "A Spinner in the Sun"?
490. What American novelist, after visiting the East End of London, embodied his experiences in a volume called "The People of the Abyss"?

491. Who said: "A man writes his life in his physique, and thus the angels discover his autobiography in his structure"?
492. Who said: "In the country the days have broad open spaces, and the very stillness seems to give a delightful roominess to the hours"?
493. Whose summer home is called "Woodchuck Lodge"?
494. Who said:
 "In essentials, Unity;
 In Non-Essentials, Liberty;
 In All Things, Charity"?
495. What noted man of letters turned his back upon Huxley in the London streets, because Huxley had taught that mankind had ape-like ancestors?
496. Who said: "We have the gift of life, and life demands that we understand things in their relation to our physical well-being"?
497. Who is known as "The Cobbler-Poet of Nuremberg"?
498. Who said: "The pastoral is in my veins"?
499. In what church were the lanterns hung as depicted in Longfellow's "Paul Revere's Ride"?
500. Who wrote "The Marshes of Glynn"?

Book Mention

The Graphic Drawing Books. The Prang Company.

A series of graded drawing books presenting graphically, by means of progressive steps a course in color, drawing, design, construction and picture study. The books are named in order from 1 to 8 and another for the High School making 9 in all. They are beautifully printed and becomingly bound in heavy paper covers. With such aids drawing, color, and construction work can not fail to be an enjoyable exercise both to teacher and pupil. Practical suggestions are given to teachers in each book. A color scheme at once simple and comprehensive is worked out by means of color charts. Chart 1 explains and illustrates the three primary colors, yellow, red and blue. Chart 2 gives the three binary colors, orange, green and violet, obtained by the union of primary colors. Chart 3 makes plain the distinction between normal colors and tints, and chart 4 explains the meaning of shades. Chart 5 shows at a glance the complementary colors and the neutral gray. So the author continues to develop his color theory to the end of the series illustrating the various shades, hues, tints, intensities and combinations of all the colors. The directions for drawing and designing are admirably clear and brief, the construction work interesting and well adapted to school work, and the colored illustrations are of the very highest order. The entire series can be heartily recommended.

Dramatic Stories for Reading and Acting. By Ada M. Skinner, St. Agatha School, New York City. Cloth, 12mo, 224 pages, illustrated. Price 35 cents. American Book Company.

In this supplementary reader for the third and fourth years, each of the stories has unusual dramatic qualities, and may be turned into a little play for acting. They are uniformly short. Some of the stories are well-known schoolbook classics in new dress, but most of them are new. They include fairy tales, stories of child life, nature stories, etc., in wide variety. Originally the work of many writers, they are as varied in style as in subject-

matter, but they have here been happily harmonized and adapted to the requirements and tastes of young pupils.

The introduction written by Franklin T. Baker of Teachers' College, Columbia University, makes a plea against dramatic exaggeration in the schools which is indeed significant and timely. On this subject Professor Baker writes: "Like many other good modern ideas in education, the dramatic work in the schools has often been carried to a ridiculous excess. Dramatization presupposes a certain emphasis a certain heightening of effects. But the school is not a training-ground for the stage and the dramatic exaggeration in good reading should fall below that of the stage, and even below the exciting passages in real life. Good reading *suggests* the action and the emotion; it does not mimic or reproduce them. It does not call for shouting, for fierce gesticulation, for violent action; if it avoids on one hand dull and lifeless monotonies, it also avoids on the other hand all boisterousness and affectation. In short, the school is not the place for melodrama or for the abandonment of those restraints that indicate good breeding. Such excesses do not educate."

The author's "Note to Teachers" in the back of the book should be carefully observed. The stories have evidently been chosen with great care.

Intimations of Heaven. By Horace Eaton Walker, London. Elliot Stock.

These verses show poetic insight and skill of no mean order. They are more virile in thought than some might expect from the title. The author is able to find his intimations almost anywhere and to portray his lively hope in smooth-running lines.

For example—

"We build Love's dearest monument to last;
But soon the ivy finds its chiselled base,
And moss obliterates the name. The blast
Has soiled it. Few short decades and no trace
Remains. But he is building better far
Who builds his monument beyond that Star!"

Again—

"For earth can be a paradise, a place
Of peace and song and glory, and a land
Of pure delight. So, turn thy wrinkled face
Away from lust, be leader of a band
Of happy mortals destined for the skies
Of blinding beauty to our human eyes."

Pinocchio Under the Sea. Translated from the Italian by Carolyn M. Della Chiesa. Edited by John W. Davis, with illustration and decorations by Florence R. Abel Wilde. The Macmillan Company. Price 50 cents.

In sixteen short and lively chapters the thrilling adventures of the famous marionette are related. He goes in search of his father and is taken by the dolphin Tursio on a journey under the sea. Of course he beholds many unusual sights and has many wonderful experiences before he succeeds in his quest. He learns many things he did not know, as will also the reader—for such is the purpose of the Pinocchio tales. Life under the sea has its marvels in multitudes, and no more interesting way of calling attention to them can be imagined than the following of these cleverly described adventures.

American History. Second Book (1763 to the Present Time). By Arthur C. Perry, Jr., Ph.D., District Superintendent of Schools, New York City, and Gertrude A. Price, Teacher in Public Schools, New York City. American Book Company. Price 60 cents.

Covers the history requirements for the sixth year. It is distinguished by its extraordinarily picturesque style. Each of the fourteen chapters is preceded by a colored picture, illustrating some dramatic incident in the text to which the pupil is constantly looking forward. Each chapter is made up of three parts; an account for the pupil to read, a summary to study, and a few leading facts to memorize. The reading portion is as interesting as any story to the child, whose attention is held by graphic accounts of the principal incidents in the growth and development of the country. Throughout, the appeal is made to the fondness of the young for adventure, heroic deeds, and dramatic events. Apt quotations from standard poems will encourage a broader reading of literature. Besides the color pictures, there are in the book many other illustrations and also numerous maps.

Harvey's Essentials of Arithmetic. By L. D. Harvey, Ph.D. President of Stout Institute, Menomonie, Wisconsin. Cloth, 12mo. American Book Company, New York, Cincinnati, and Chicago.

First Book. For 2d, 3d, and 4th school years. 224 pages. Price, 25 cents.

Second Book. For 5th, 6th, 7th, and 8th years. 507 pages. Price, 50 cents.

This new series, by one of the leading American educational authorities, correlates the work in arithmetic with agriculture, commerce, manual training, and the household arts. The books are confined to the practical and the useful, and provide many applications of numbers to problems of a prevocational character. They teach the pupil to be accurate and quick in handling numbers, and to interpret and analyze problems correctly. Among the noteworthy features of the series are the careful gradation; the frequent, cumulative, and thorough reviews; the many useful suggestions to teachers; the frequent drills; the insistence on checking methods; the Study Recitation; the problems to be made by the pupils (self-activity); and the problems without numbers. Altogether, there are in both books about 20,000 exercises, forming an unequalled wealth of new and carefully selected practical problem material, relating to the everyday interests of children and to modern business.

Lessons in Pedagogy

By Charles H. Davis

EXAMINATION QUESTIONS IN HISTORY OF EDUCATION, METHODS OF
TEACHING, THEORY AND PRACTICE, AND
SCHOOL MANAGEMENT

Note: As a final review for teachers who have been following the Normal Reading Course in Educational Foundations, or for those preparing for Teachers' Examinations, the following questions have been selected and prepared. Many of these questions have been taken from previous examination papers.

Teachers, who desire to write the answers to any of these sets of questions and send them to Mr. C. H. Davis, care Educational Foundations, 31 East 27th Street, New York City, N. Y.,

may have their answer papers corrected and returned to them, provided return postage is sent with the answers.

I

HISTORY OF EDUCATION

Answer any five of these:

1. What was the period of the monastic schools, and what their characteristics of matter and method?
2. What was the time and place of Luther's educational prominence, and what were his chief arguments in favor
 - (a) Of popular education?
 - (b) Of compulsory education?
 - (c) Of state supervision?
3. Distinguish between the educational theories of the humanists, the realists, and the naturalists? Who were the great representatives of these theories?
4. Present summaries of the principles of Pestalozzi, and of Froebel. What reforms did Froebel undertake? For what one result were Froebel and Pestalozzi working?
5. Give a brief statement of the educational theories of Comenius.
6. Present an outline of the views of Herbert Spencer as to:
 - (a) The teaching that gives most valuable knowledge and best disciplines the faculties.
 - (b) The end and aim of education.
 - (c) The test of the relative value of knowledge.
 - (d) The method to be pursued in teaching.
7. In what respects do the German schools excel?
8. What aid has been derived from the National government for education?

II

HISTORY AND PRINCIPLES OF EDUCATION

1. In what does moral or ethical education consist? State means of providing such education in school, and indicate how they may be employed.

2. What is interest in the educational sense? What kinds may be distinguished? Lay down and illustrate three general rules to guide the teacher in securing the interest of his pupils.

3. "Since life is full of obstacles, and character is strengthened by overcoming them, the school course should compel students to do distasteful and difficult things simply because they are distasteful and difficult."

Give arguments against this view and state what you deem to be the true doctrine respecting study for the sake of mental discipline.

4. Give three important characteristics of young children, and state principles to be borne in mind by the teacher that are derived from these characteristics. Illustrate the application of one of these principles.

5. "Everything that enters the human understanding is introduced by the senses."—Rousseau.

Draw from this dictum corollaries to be kept in view by the practical teacher. Illustrate.

6. Describe accurately the main features of the method of teaching used by Socrates. What are the limitations of such a method as applied in the school room? What are its advantages?

III

METHODS OF TEACHING

Answer eight questions. State grade when referring to elementary school.

1. Describe in outline the conduct of a reading lesson in year 3 or 7 of the elementary school, giving reason for each exercise and indicating practical correlation with other subjects.

2. When the same reading lesson is given to 40 children and each one knows that all the others know it, and all know that the teacher knows it, the social element is effectively eliminated. When each one has something individual to expose, the social stimulus is an effective stimulus to acquisition. (John Dewey.) Explain this statement and suggest some means for providing the "effective motive" in question.

3. (a) What considerations would guide you in the selections of subjects for English composition? (b) Describe your method of correcting compositions in the 7th year of school, and state its advantages and disadvantages.

4. (a) What aim should be sought in teaching penmanship? (b) Briefly describe your method of achieving these ends. (c) Describe a good method of conducting a recitation in spelling (covering manner of spelling, criticism, correction). What are the advantages of the method you describe?

5. What is the purpose for which you would require pupils in the highest grade of the school to make outlines in history? What material would you lead pupils to put into such an outline? What directions would you give pupils to aid them in making outlines?

6. At what stage in the course may arithmetic be properly begun. How may the subject of percentage and its application be abridged or simplified?

7. (a) Describe two methods of drill in addition. (b) "A tank has two supply pipes, one of which will fill in four hours, the other in five hours. It also has a drain pipe that will empty it in six hours. If all these pipes are open how long will it take to fill the tank?" Show how pupils may be lead to this problem both by arithmetic and algebra. State under what circumstances you would use each method.

8. State with reasons the chief use of the study of grammar. Tell how you would apply grammatical analysis in teaching the subject.

9. (a) What is the topical method of teaching geography and what are its advantages? (b) State the order in which you would arrange the topics for study of S. America. Give reasons. What devices and aid would you use in this connection?

10. Give plan for lesson or lessons on "Air has weight." State materials, apparatus and experiments to be employed.

IV

METHODS

1. (a) Regarding a course of lessons in reading, in one of the early years of the elementary schools, briefly indicate with illus-

trations two effective ways of leading pupils to understand the meaning of new words. (b) What considerations would guide you in selecting passages to be memorized, and how would you lead pupils to commit to memory such passages? (c) Give four directions, such as might be helpful to a young teacher, for guiding pupils to read with proper expression. (d) State in detail what manual work you deem it profitable to intrude in connection with the study of some specified selection.

2. "Relationship between man and his environment is the very soul of geography." (a) Explain and illustrate the meaning of this statement. (b) In the light of the view expressed above, describe a method for the study of a river or any other topic in geography indicating facts to be observed and explanation to be given.

3. (a) Explain briefly what is meant by the formal steps of instruction. (b) States the principle underlying the formal steps. (c) Give your judgment as to the utility of this doctrine.

4. (a) It has been held that in the teaching of English composition the thorough work of the class should be directed first to whole compositions, then to paragraphs, then to sentences, then to clauses and phrases, and then to single words. State and either defend or combat the principle involved in such a sequence. (b) Illustrate the application of the same principle to other subjects.

5. (a) Discuss concisely the subject of drill in teaching, distinguishing excellent from poor ways of drilling, illustrate. (b) Without touching on points treated in (a) describe, with reasons and illustrations two typical modes of effective review in history.

6. (a) Write directions for teachers about to begin with their classes the division of common fractions. (b) Give in outline an argument against the Grude method. (c) Show briefly how the simple equation may be made a part of elementary arithmetic, indicating the topics to which it is applicable. (d) Give reasons for or against the use of cases, rules and formulas in teaching percentage.

7. Answer (a) or (b). (a) Give in order the steps to be

taken in teaching a class of beginners to discriminate colors. Give reasons. (b) Indicate briefly what work in observation a class should be led to do as a preparation for drawing a group of objects.

8. Specify the forms of life which you would encourage your teacher to bring into the school room. Specify forms of life which you would consider it desirable and expedient to keep in a school room? Give reasons.

8. Give succinctly your judgment as to each of the following point briefly indicating the reasons: (a) Advantages and disadvantages of vertical penmanship. (b) The proper place of concert recitation. (c) The point at which the teaching of formal grammar should be commenced.

V

METHODS AND SCHOOL ECONOMY

Each of the following questions has ten credits assigned to it:

1. Name advantages of asking questions, the answers to which are to be given after investigation by the pupils.

2. Name some of the advantages of cultivating the powers of observation.

3. (a) What qualifications distinguish the accomplished teacher? (b) How may they be acquired?

4. The teacher can scarcely ask himself a more important question than this: "What is the natural order of presenting a given subject?" Why is this an important question?

5. Name three qualifications a teacher should have properly to conduct a recitation.

6. State objections to allowing members of a class to answer questions simultaneously.

7. How should the pronunciation of difficult words be taught in primary grades?

8. In oral spelling what direction should be adhered to as to manner of pronunciation on the part of the teacher, and trial of spelling on the part of the pupil?

9. Name qualities of penmanship resulting from a good method of teaching the subject.
10. What should be the aim in primary language lessons?

VI

METHODS AND SCHOOL ECONOMY

Each of the following questions has ten credits assigned to it:

1. Name some materials useful in color instruction.
2. Why do pupils frequently have a distaste for grammar?
3. What are liable to be the characteristics of recitations not specifically prepared for by the teacher?
4. What is the purpose of using splints in bundles of tens in teaching number?
5. State objections to awarding prizes on the basis of a comparison of the conduct of one child with that of others.
6. The teacher is mainly responsible for the intellectual growth of the child. Under what heads does Page consider this proposition?
7. What are the ends or purposes to be attained by moral instruction?
8. What is the test of the efficiency of school discipline?
9. What preparatory lessons in geography should precede the use of text-book lessons?
10. What are the immediate ends of intellectual training?

VII

METHODS AND SCHOOL ECONOMY

Each of the following questions has six and two-thirds credits assigned to it:

1. How may a child best acquire a practical knowledge of grammar?
2. Illustrate by two sentences that a pronoun is a word used for a noun.
3. In primary reproduction exercises, what preparatory work should precede each written exercise?

4. (a) Name business forms that should be taught. (b) Give an example of one of these forms and indicate the salient points therein that should be taught.

5. In teaching, ideas should precede words. Why?

6. In every lesson, what besides the thought should receive special attention?

7. At what stage of advancement should pupils be required to give logical reasons for arithmetical processes?

8. Name three qualities in the teacher upon which good discipline depends.

9. If a pupil is indifferent to his failures, how may the fault be corrected?

10. What benefits accrue from calisthenic exercises in school?

11. Give an illustration of the teaching of physiology experimentally.

12. State points of excellence in the system of penmanship you use.

13. Shall written exercises for the whole school be required at stated times? Give reasons for your answer.

14. What is the best way for children to study a spelling lesson?

15. Explain how the old adage, "Eyes are better than ears," applies to studying spelling lessons.

VIII

METHODS AND SCHOOL ECONOMY

Each of the following questions has ten credits assigned to it:

1. What study should be taught in connection with geography? Why?

2. When may a child almost be said to be educated according to Page's Theory and Practice of Teaching?

3. Name four personal habits that should characterize the teacher.

4. Give reasonable means of securing good order.

5. Distinguish between the phonic and the phonetic methods of teaching reading.

6. Give the method by which the fact that three-fifths is of

greater value than three-eighths can be demonstrated to a pupil by concrete illustrations.

7. From a series of concrete illustrations we demonstrate the fact that three-sevenths is larger than three-ninths, and that five-ninths is larger than five-elevenths. What general truth in regard to fractions is to be deduced? What power of the mind is mainly cultivated in such an exercise?

8. What is the comprehensive and supreme test of school training?

9. What does a practical consideration of school government as an art include?

10. Why should teachers adopt plans specially adapted to their conditions and ability?

IX

METHODS AND SCHOOL ECONOMY

Each of the following questions has ten credits assigned to it:

1. Under what circumstances should a teacher change the wording of definitions found in the text-book used?

2. Which of the following objects of education is more important: the acquisition of knowledge, or mental development? Give reason for answer.

3. Give two reasons why it is better to have the light enter a schoolroom from the north than from any other direction.

4. Should the teacher aid the pupils in the preparation of their lessons by solving problems and answering questions at other times than during the recitation? Why?

5. Why should the syllabication of words be taught? When can it best be done?

6. What are the advantages of phonic spelling, as it is commonly called?

7. What is the advantage of construction lines in drawing? Illustrate by drawing suitable construction lines for a map of North America.

8. Name three conditions necessary to attention in a recitation.

9. How should the geography of the State of New York be taught by the inductive method?

10. What place should mental arithmetic be given in school? What is its value?

X

METHODS AND SCHOOL ECONOMY

Each of the following questions has twelve and one-half credits assigned to it:

1. When should technical definitions be taught?
2. State three reasons why it is important to train the senses of pupils.
3. Name three important subjects which belong to school economy.
4. Illustrate by some familiar act the relation, and exercise of their powers, knowing, feeling and willing.
5. What kind of training in development is calculated to diminish (a) ignorance? (b) disease? (c) viciousness? (d) To which of these does the teacher's responsibility extend?
6. Why should language lessons precede the study of grammar?
7. State two main objects of a recitation?
8. Mention one advantage, and one disadvantage of industrial training in public schools.

XI

SCHOOL MANAGEMENT

Answer only eight questions.

1. (a) Discuss the value of home lessons. (b) What should be the limit of home lessons in subjects and hours in years three and seven of school? Give reasons.
2. State fully Spencer's theory of punishment with reasons for and against. Suggest instances when it would and when it would not be applicable and tell why.
3. How should a principal (a) estimate a teacher's work, (b) improve the work of an unsuccessful teacher?
4. Describe five common faults in class teaching, the effects of such faults and the remedies you would suggest.
5. (a) What rule should be observed in making a school program? Give reasons. (b) Make a program for two successive days in the sixth year of school.
6. Describe a system for heating and ventilating of a large building stating the principles on which such system is based.

7. (a) To what extent should methods in a school be uniform?
- (b) How should a teacher with a hobby be treated?
8. Treating each separately tell how you would try to secure in your school five important school virtues.
9. Discuss the subject of promotion in elementary schools.
10. A certain boy when called upon to recite always stammers, and gets red in the face, when seated he has a habit of biting his nails and talking to his neighbor; if he misses a lesson he will sulk and if he fails in the forenoon he will (seemingly as a result) stay away from the afternoon session. What are the causes of his various peculiarities, and how would you treat the case?

XII

SCHOOL MANAGEMENT

1. Describe the physical conditions and equipment of a school-room designed to have the maximum of comfort and efficiency.
2. In a graded class system the pupils are classified according to their proficiency in one subject, or in two subjects; or according to their average standing in all subjects; in the departmental system there is a separate classification of pupils in each subject. Discuss the question of classification in elementary schools stating the advantages and the disadvantages of the several methods of classification.
3. (a) Describe a plan for the ordering, distribution, and care of supplies in a school so as to secure sufficiency of equipment with economy.
- (b) Describe in full how you would provide for the orderly entrance and dismissal of the pupils of a school.
4. State the advantages and the disadvantages of a routine or automatic system of punishment in school.
5. Discuss the means of enlisting the feelings and the service of the pupils in a class on the side of order and discipline.
6. (a) Mention four means by which you would seek to arrive at a judgment regarding a teacher's work during a term.
- (b) By what means would you endeavor to correct faults in methods of teaching? Illustrate by reference to four specific faults and the proper means of correcting each fault.

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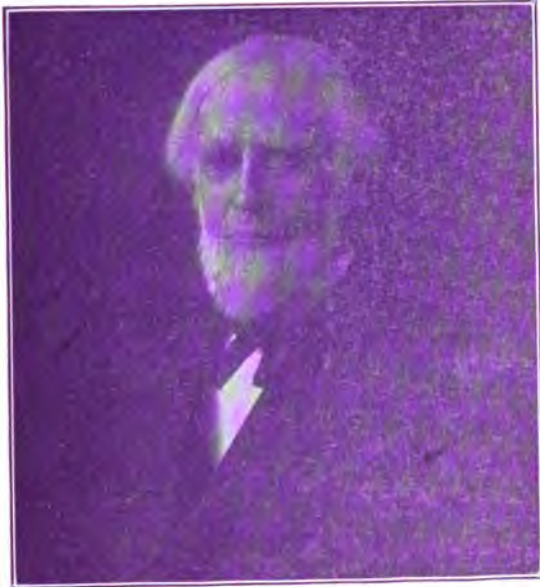
Educational Foundations

A Monthly Magazine of Pedagogy

Vol. 25

SEPTEMBER, 1913

No. 1



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PUBLISHED MONTHLY, EXCEPT JULY AND AUGUST.

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(Special Contributor to This Number)

EDUCATIONAL MAGAZINE PUBLISHING COMPANY

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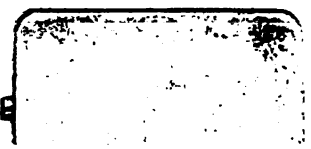
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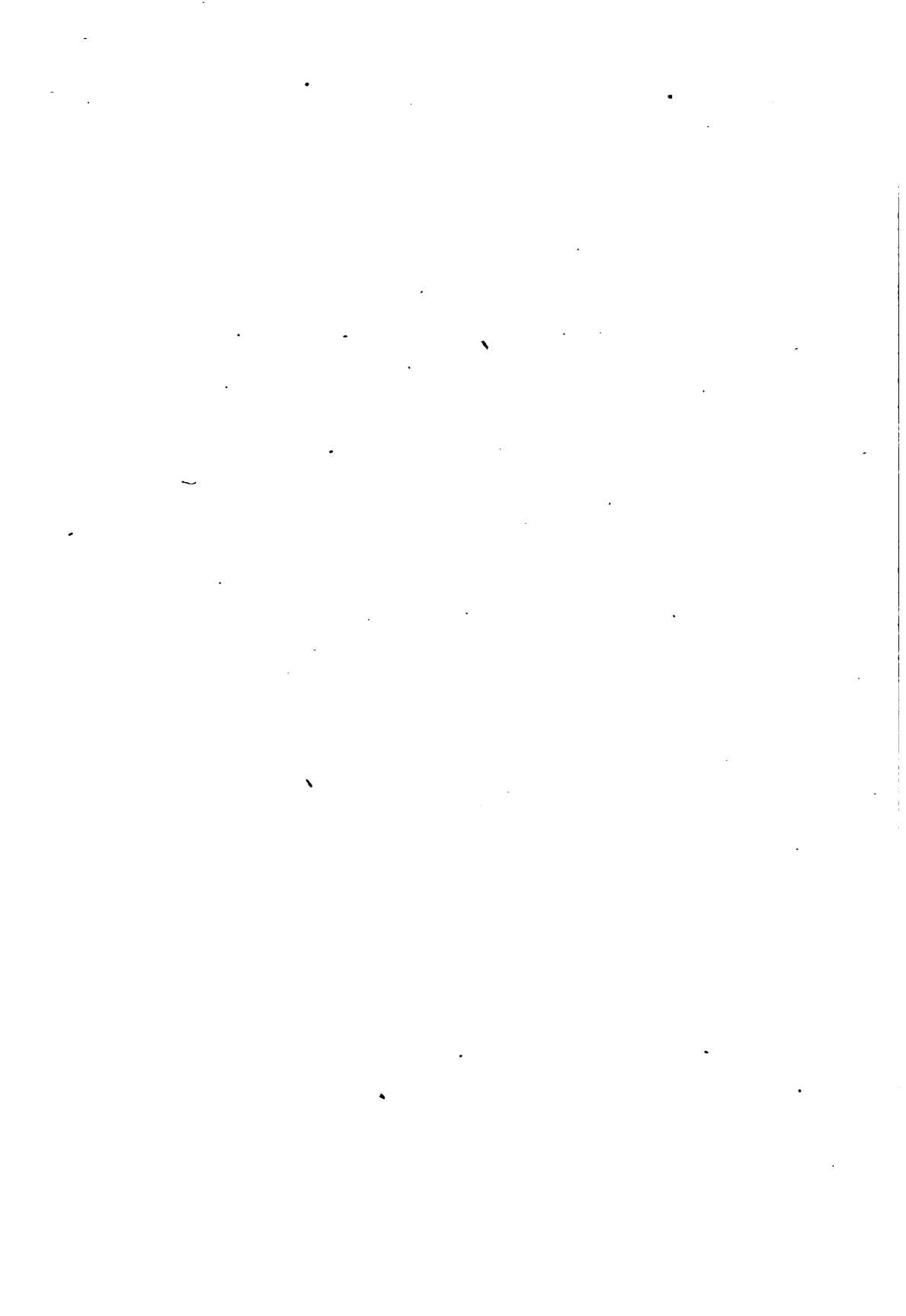


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